

Science framework for conservation and restoration of the sagebrush biome: Linking the Department of the Interior's Integrated Rangeland Fire Management Strategy to long-term strategic conservation actions

www.nrfirescience.org/resource/15201

The Science Framework is intended to link the Department of the Interior's Integrated Rangeland Fire Management Strategy with long-term strategic conservation actions in the sagebrush biome. The Science Framework provides a multiscale approach for prioritizing areas for management and determining effective management strategies...

Author(s): Jeanne C. Chambers, Jeffrey L. Beck, John Bradford, Jared Bybee, Steven B. Campbell, John Carlson, Thomas J. Christiansen, Karen J. Clause, Gail Collins, Michele R. Crist, Jonathan B. Dinkins, Kevin E. Doherty, Fred Edwards, Shawn Espinosa, Kathleen A. Griffin, Paul Griffin, Jessica R. Haas, Steven E. Hanser, Douglas W. Havlina, Kenneth F. Henke, Jacob D. Hennig, Linda A. Joyce, Francis F. Kilkenny, Sarah M. Kulpa, Laurie L. Kurth, Jeremy D. Maestas, Mary Manning, Kenneth E. Mayer, Brian A. Meador, Clinton McCarthy, Michael L. Pellant, Marco A. Perea, Karen L. Prentice, David A. Pyke, Lief A. Wiechman, Amarina Wuenschel

Year Published: 2017

Type: Document

Technical Report or White Paper

Mapping tree canopy cover in support of proactive prairie grouse conservation in western North America

www.nrfirescience.org/resource/14922

Invasive woody plant expansion is a primary threat driving fragmentation and loss of sagebrush (*Artemisia* spp.) and prairie habitats across the central and western United States. Expansion of native woody plants, including conifer (primarily *Juniperus* spp.) and mesquite (*Prosopis* spp.), over the past century is...

Author(s): Michael J. Falkowski, Jeffrey S. Evans, David E. Naugle, Christian A. Hagen, Scott A. Carleton, Jeremy D. Maestas, Azad Henareh Khalyani, Aaron J. Poznanovic, Andrew J. Lawrence

Year Published: 2017

Type: Document

Book or Chapter or Journal Article

Mountain big sagebrush - Fire ecology and management

www.nrfirescience.org/resource/15648

Nearly half of the area occupied by sagebrush (*Artemisia* spp.) ecosystems before European-American settlement has been lost due to conversion to other land cover types, and agriculture, urbanization, and industrial development. Thus, conservation and proper management of these ecosystems has been a priority, especially following the...

Author(s): Robin J. Innes

Year Published: 2017

Type: Document

Research Brief or Fact Sheet

Landowner guide to sage-grouse conservation in Wyoming

www.nrfirescience.org/resource/15280

Sagebrush ecosystems are complex and so are the efforts to conserve sage-grouse. Those who own or manage sage-grouse habitat play a critical role in conserving this species in Wyoming, and this guide is intended to provide a concise source of science-based information about the greater sage-grouse and the habitat required for its...

Author(s): Leanne L. Correll, Rebecca M. Burton, John Derek Scasta, Jeffrey L. Beck

Year Published: 2017

Type: Document

Targeted woodland removal to recover at-risk grouse and their sagebrush-steppe and prairie ecosystems

www.nrfirescience.org/resource/14924

In this paper, we summarize key findings from a special issue of the journal Rangeland Ecology & Management examining socioecological aspects of woodland expansion and management actions to address this threat in sagebrush and prairie ecosystems. We highlight species and ecosystem outcomes that may result from recent...

Author(s): Richard F. Miller, David E. Naugle, Jeremy D. Maestas, Christian A. Hagen, Galon Hall

Year Published: 2017

Type: Document

Book or Chapter or Journal Article

Detecting unburned areas within wildfire perimeters using Landsat and ancillary data across the northwestern United States

www.nrfirescience.org/resource/14897

Wildfires shape the distribution and structure of vegetation across the inland northwestern United States. However, fire activity is expected to increase given the current rate of climate change, with uncertain outcomes. A fire impact that has not been widely addressed is the development of unburned islands; areas within the fire...

Author(s): Arjan J. H. Meddens, Crystal A. Kolden, James A. Lutz

Year Published: 2016

Type: Document

Book or Chapter or Journal Article

Duff distribution influences fire severity and post-fire vegetation recovery in sagebrush steppe

www.nrfirescience.org/resource/14820

Woody plant expansion is a global phenomenon that alters the spatial distribution of nutrients, biomass, and fuels in affected ecosystems. Altered fuel patterns across the landscape influences ecological processes including fire behavior, fire effects, and can impact post-fire plant germination and establishment. The purpose of this...

Author(s): Nathan I. Weiner, Eva K. Strand, Stephen C. Bunting, Alistair M. S. Smith

Year Published: 2016

Type: Document

Book or Chapter or Journal Article

Effects of prescribed fire on wildlife and wildlife habitat in selected ecosystems of North America

www.nrfirescience.org/resource/14715

Prescribed fire is applied widely as a management tool in North America to meet various objectives such as reducing fuel loads and fuel continuity, returning fire to an ecosystem, enhancing wildlife habitats, improving forage, preparing seedbeds, improving watershed conditions, enhancing nutrient cycling, ...

Author(s): William M. Block, L. Mike Conner, Paul A. Brewer, Paulette Ford, Jonathan Haufler, Andrea Litt, Ronald E. Masters, Laura R. Mitchell, Jane Park

Year Published: 2016

Type: Document

Technical Report or White Paper

Spatiotemporal variability of wildland fuels in US Northern Rocky Mountain forests

www.nrfirescience.org/resource/14689

Fire regimes are ultimately controlled by wildland fuel dynamics over space and time; spatial distributions of fuel influence the size, spread, and intensity of individual fires, while the temporal distribution of fuel deposition influences fire's frequency and controls fire size. These "shifting fuel mosaics" are both a cause and a...

Author(s): Robert E. Keane

Year Published: 2016

Type: Document

Book or Chapter or Journal Article

Ecohydrologic impacts of rangeland fire on runoff and erosion: a literature synthesis

www.nrfirescience.org/resource/14674

Fire can dramatically influence rangeland hydrology and erosion by altering ecohydrologic relationships. This synthesis presents an ecohydrologic perspective on the effects of fire on rangeland runoff and erosion through a review of scientific literature spanning many decades. The objectives are: (1) to introduce rangeland hydrology...

Author(s): Frederick B. Pierson, Christopher Jason Williams

Year Published: 2016

Type: Document

Synthesis, Technical Report or White Paper

Centrocercus minimus, Centrocercus urophasianus (Gunnison sage-grouse, greater sage-grouse)

www.nrfirescience.org/resource/10784

This FEIS species review synthesizes information on the relationship of *Centrocercus minimus*, *Centrocercus urophasianus* (Gunnison sage-grouse, greater sage-grouse) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided...

Author(s): Robin J. Innes

Year Published: 2016

Type: Document

Synthesis

Using resilience and resistance concepts to manage threats to sagebrush ecosystems, Gunnison sage-grouse, and Greater sage-grouse in their eastern range: a strategic multi-scale approach

www.nrfirescience.org/resource/14967

This report provides a strategic approach developed by a Western Association of Fish and Wildlife Agencies interagency working group for conservation of sagebrush ecosystems, Greater sage-grouse, and Gunnison sage-grouse. It uses information on (1) factors that influence sagebrush ecosystem resilience to disturbance and resistance...

Author(s): Jeanne C. Chambers, Jeffrey L. Beck, Steven B. Campbell, John Carlson, Thomas J. Christiansen, Karen J. Clause, Jonathan B. Dinkins, Douglas W. Havlina, Kevin E. Doherty, Kathleen A. Griffin, Douglas W. Havlina, Kenneth F. Henke, Jacob D. Hennig, Laurie L. Kurth, Jeremy D. Maestas, Mary Manning, Kenneth E. Mayer, Brian A. Meador, Clinton McCarthy, Marco A. Perea, David A. Pyke

Year Published: 2016

Type: Document

Technical Report or White Paper

Short-term impacts of fire-mediated habitat alterations on an isolated bighorn sheep population

www.nrfirescience.org/resource/14889

Habitat alterations may improve and expand wildlife habitats, and bolster waning wildlife populations. We used global positioning system (GPS) locations to monitor 38 bighorn sheep (*Ovis canadensis* Shaw) that were translocated to the Seminoe Mountains, Wyoming, USA, in 2009 and 2010, and 24 bighorns captured in 2011 to investigate...

Author(s): Justin G. Clapp, Jeffrey L. Beck

Year Published: 2016

Type: Document

Book or Chapter or Journal Article

The integrated rangeland fire management strategy actionable science plan

www.nrfirescience.org/resource/14697

The Integrated Rangeland Fire Management Strategy (hereafter Strategy, DOI 2015) outlined the need for coordinated, science-based adaptive management to achieve long-term protection, conservation, and restoration of the sagebrush (*Artemisia* spp.) ecosystem. A key component of this management approach is the...

Author(s): Integrated Rangeland Fire Management Strategy Actionable Science Plan Team

Year Published: 2016

Type: Document

Management or Planning Document

Postfire shrub cover dynamics: A 70-year fire chronosequence in mountain big sagebrush communities

www.nrfirescience.org/resource/15422

Fire is natural in sagebrush (*Artemisia* L.) communities. In this study, we quantify effects of time since last burn (TSLB) on shrub cover over a 70-year (yr) fire chronosequence. We sampled mountain big sagebrush communities with very large-scale aerial (VLSA) imagery and measured sagebrush, antelope bitterbrush (*Purshia tridentata*...

Author(s): Corey A. Moffet, J. Bret Taylor, D. Terrance Booth

Year Published: 2015

Type: Document

Book or Chapter or Journal Article

Spectroscopic analysis of seasonal changes in live fuel moisture content and leaf dry mass

www.nrfirescience.org/resource/13001

Live fuel moisture content (LFMC), the ratio of water mass to dry mass contained in live plant material, is an important fuel property for determining fire danger and for modeling fire behavior. Remote sensing estimation of LFMC often relies on an assumption of changing water and stable dry mass over time. Fundamental understanding...

Author(s): Yi Qi, Philip E. Dennison, William Matt Jolly, Rachel C. Kropp, Simon C. Brewer

Year Published: 2014

Type: Document

Book or Chapter or Journal Article

Bromus tectorum response to fire varies with climate conditions

www.nrfirescience.org/resource/12979

The invasive annual grass *Bromus tectorum* (cheatgrass) forms a positive feedback with fire in some areas of western North America's sagebrush biome by increasing fire frequency and size, which then increases *B. tectorum* abundance post-fire and dramatically alters ecosystem structure and processes. However, this positive response to...

Author(s): Kimberly Taylor, Tyler Brummer, Lisa J. Rew, Matt Lavin, Bruce D. Maxwell

Year Published: 2014
Type: Document
Book or Chapter or Journal Article

Quantifying restoration effectiveness using multi-scale habitat models: implications for sage-grouse in the Great Basin

www.nrfirescience.org/resource/12947

A recurrent challenge in the conservation of wide-ranging, imperiled species is understanding which habitats to protect and whether we are capable of restoring degraded landscapes. For Greater Sage-grouse (*Centrocercus urophasianus*), a species of conservation concern in the western United States, we approached this problem by...

Author(s): Robert S. Arkle, David S. Pilliod, Steven E. Hanser, Matthew L. Brooks, Jeanne C. Chambers, James B. Grace, Kevin C. Knutson, David A. Pyke, Justin L. Welty, Troy A. Wirth

Year Published: 2014

Type: Document

Book or Chapter or Journal Article

Patterns and mechanisms of plant succession after fire on Artemisia-grass sites in southeastern Idaho

www.nrfirescience.org/resource/15400

Cover data for plant species on eight environmentally similar sites that were each burned in a different year (from 2 to 36 years ago) were used to construct a composite sequence of vegetational change after fire on Artemisia-grassland sites in southeastern Idaho. Some species were early successional such as *Lithospermum ruderales*,...

Author(s): David L. Humphrey

Year Published: 2014

Type: Document

Book or Chapter or Journal Article

Prescribed fire effects on resource selection by cattle in mesic sagebrush steppe. part 1: spring grazing

www.nrfirescience.org/resource/12148

Prescribed fire is commonly applied world-wide as a tool for enhancing habitats and altering resource-selection patterns of grazing animals. A scientific basis for this practice has been established in some ecosystems but its efficacy has not been rigorously evaluated on mesic sagebrush steppe. Beginning in 2003, resource-selection...

Author(s): Patrick E. Clark, Jaechoul Lee, Kyungduk Ko, Ryan M. Nielson, Douglas E. Johnson, David C. Ganskopp, Joe Chigbrow, Frederick B. Pierson, Stuart P. Hardegree

Year Published: 2014

Type: Document

Book or Chapter or Journal Article

Using resistance and resilience concepts to reduce impacts of invasive annual grasses and altered fire regimes on the sagebrush ecosystem and greater sage-grouse: a strategic multi-scale approach

www.nrfirescience.org/resource/12989

This Report provides a strategic approach for conservation of sagebrush ecosystems and Greater Sage-Grouse (sage-grouse) that focuses specifically on habitat threats caused by invasive annual grasses and altered fire regimes. It uses information on factors that influence (1) sagebrush ecosystem resilience to disturbance and...

Author(s): Jeanne C. Chambers, David A. Pyke, Jeremy D. Maestas, Michael L. Pellant, Chad S. Boyd,

Steven B. Campbell, Shawn Espinosa, Douglas W. Havlina, Kenneth E. Mayer, Amarina Wuenschel
Year Published: 2014
Type: Document
Management or Planning Document

Cattle grazing and vegetation succession on burned sagebrush steppe

www.nrfirescience.org/resource/12968

There is limited information about the effects of cattle grazing to longer-term plant community composition and herbage production following fire in sagebrush steppe. This study evaluated vegetation response to cattle grazing over 7 yr (2007-2013) on burned Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis* [Beetle &...

Author(s): Jonathan D. Bates, Kirk W. Davies

Year Published: 2014

Type: Document

Book or Chapter or Journal Article

Resilience to stress and disturbance, and resistance to *Bromus tectorum* L. invasion in cold desert shrublands of western North America

www.nrfirescience.org/resource/12897

Alien grass invasions in arid and semi-arid ecosystems are resulting in grass-fire cycles and ecosystem-level transformations that severely diminish ecosystem services. Our capacity to address the rapid and complex changes occurring in these ecosystems can be enhanced by developing an understanding of the environmental factors and...

Author(s): Jeanne C. Chambers, Bethany A. Bradley, Cynthia S. Brown, Carla M. D'Antonio, Matthew J. Germino, James B. Grace, Stuart P. Hardegree, Richard F. Miller, David A. Pyke

Year Published: 2014

Type: Document

Book or Chapter or Journal Article

A field guide for selecting the most appropriate treatment in sagebrush and pinon-juniper ecosystems in the Great Basin: Evaluating resilience to disturbance and resistance to invasive annual grasses, and predicting vegetation response

www.nrfirescience.org/resource/14682

This field guide identifies seven primary components that largely determine resilience to disturbance, as well as resistance to invasive grasses and plant succession following treatment of areas of concern.

The primary components are (1) characteristics of the ecological site, (2) current vegetation prior to treatment, (3)...

Author(s): Richard F. Miller, Jeanne C. Chambers, Michael L. Pellant

Year Published: 2014

Type: Document

Technical Report or White Paper

A review of fire effects on vegetation and soils in the Great Basin Region: response and ecological site characteristics

www.nrfirescience.org/resource/12147

This review synthesizes the state of knowledge on fire effects on vegetation and soils in semi-arid ecosystems in the Great Basin Region, including the central and northern Great Basin and Range, Columbia River Basin, and the Snake River Plain. We summarize available literature related to: (1) the effects of environmental gradients...

Author(s): Richard F. Miller, Jeanne C. Chambers, David A. Pyke, Frederick B. Pierson

Year Published: 2013

Type: Document
Synthesis, Technical Report or White Paper

The rising Great Plains fire campaign: citizens' response to woody plant encroachment

www.nrfirescience.org/resource/12011

Despite years of accumulating scientific evidence that fire is critical for maintaining the structure and function of grassland ecosystems in the US Great Plains, fire has not been restored as a fundamental grassland process across broad landscapes. The result has been widespread juniper encroachment and the degradation of the...

Author(s): Dirac Twidwell, William E. Rogers, Samuel D. Fuhlendorf, Carissa L. Wonkka, David M. Engle, John R. Weir, Urs P. Kreuter, Charles A. Taylor

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Does Kochia prostrata spread from seeded sites? an evaluation from southwestern Idaho, USA

www.nrfirescience.org/resource/12145

Purposeful introductions of exotic species for rehabilitation efforts following wildfire are common on rangelands in the western United States, though ecological impacts of exotic species in novel environments are often poorly understood. One such introduced species, *Kochia prostrata* (L.) Schrad (forage kochia) has been seeded on...

Author(s): Erin C. Gray, Patricia S. Muir

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Using native annual plants to restore post-fire habitats in western North America

www.nrfirescience.org/resource/12139

Increasing fire frequencies and uncharacteristic severe fires have created a need for improved restoration methods across rangelands in western North America. Traditional restoration seed mixtures of native perennial mid- to late-seral plant species may not be suitable for intensely burned sites that have been returned to an early-...

Author(s): Christopher M. Herron, Jayne L. Jonas, Paul J. Meiman, Mark W. Paschke

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Fire, defoliation, and competing species alter *Aristida purpurea* biomass, tiller, and axillary bud production

www.nrfirescience.org/resource/11979

Aristida purpurea (purple threeawn) is a competitive native perennial grass with monoculturistic tendencies and poor palatability. We examined effects of fire, defoliation, and interspecific/intraspecific planting for 1) threeawn responses in the presence of threeawn, *Bouteloua gracilis*, or *Pascopyrum smithii*, and 2) *B. gracilis* and...

Author(s): M. L. Russell, Lance T. Vermeire, N. A. Dufek, Dustin J. Strong

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

The economics of fuel management: wildfire, invasive plants, and the dynamics of sagebrush

rangelands in the western United States

www.nrfirescience.org/resource/12134

In this article we develop a simulation model to evaluate the economic efficiency of fuel treatments and apply it to two sagebrush ecosystems in the Great Basin of the western United States: the Wyoming sagebrush steppe and mountain big sagebrush ecosystems. These ecosystems face the two most prominent concerns in sagebrush...

Author(s): Michael H. Taylor, Kimberly Rollins, Mimako Kobayashi, Robin J. Tausch

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Historical fire regimes, reconstructed from land-survey data, led to complexity and fluctuation in sagebrush landscapes

www.nrfirescience.org/resource/11972

Sagebrush landscapes provide habitat for Sage-Grouse and other sagebrush obligates, yet historical fire regimes and the structure of historical sagebrush landscapes are poorly known, hampering ecological restoration and management. To remedy this, General Land Office Survey (GLO) survey notes were used to reconstruct over two...

Author(s): Beth E. Bukowski, William L. Baker

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

Wind erosion from a sagebrush steppe burned by wildfire: measurements of PM10 and total horizontal sediment flux

www.nrfirescience.org/resource/12140

Wind erosion and aeolian transport processes are under studied compared to rainfall-induced erosion and sediment transport on burned landscapes. Post-fire wind erosion studies have predominantly focused on near-surface sediment transport and associated impacts such as on-site soil loss and site fertility. Downwind impacts, including...

Author(s): Natalie S. Wagenbrenner, Matthew J. Germino, Brian K. Lamb, Peter R. Robichaud, Randy B. Foltz

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Modelling conditional burn probability patterns for large wildland fires

www.nrfirescience.org/resource/12005

We present a technique for modelling conditional burn probability patterns in two dimensions for large

wildland fires. The intended use for the model is strategic program planning when information about future fire weather and event durations is unavailable and estimates of the average probabilistic shape and extent of large fires...

Author(s): Pamela S. Ziesler, Douglas B. Rideout, Robin Reich

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Trial by fire

www.nrfirescience.org/resource/12135

1) Conservation partners across 11 western states are rallying in unprecedented fashion to reduce threats to sage-grouse and the sagebrush ecosystem they occupy. 2) Improvements made in the Bureau of Land Management's (BLM) wildfire policy are a tremendous step forward but the 2012 wildfire season is a harsh reminder that more...

Author(s): Tim Murphy, David E. Naugle, Randall Eardley, Jeremy D. Maestas, Tim Griffiths, Michael L. Pellant, San J. Stiver

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Models for predicting fuel consumption in sagebrush-dominated ecosystems

www.nrfirescience.org/resource/11978

Fuel consumption predictions are necessary to accurately estimate or model fire effects, including pollutant emissions during wildland fires. Fuel and environmental measurements on a series of operational prescribed fires were used to develop empirical models for predicting fuel consumption in big sagebrush (*Artemisia tridentata*...

Author(s): Clinton S. Wright

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Summary of science, activities, programs, and policies that influence the rangewide conservation of greater sage-grouse (*Centrocercus urophasianus*)

www.nrfirescience.org/resource/15420

Because of their broad range, variations in population traits and characteristics across this range, and the variability in habitat conditions and threats within this range, conservation of sage-grouse is a unique challenge compared to isolated or range-restricted species, primarily due to the scale of the effort. This complexity is...

Author(s): D.J. Manier, D.J.A. Wood, Z.H. Bowen, R.M. Donovan, M.J. Holloran, L.M. Juliusson, K.S. Mayne, S.J. Oyler-McCance, F.R. Quamen, D.J. Saher, A.J. Titolo

Year Published: 2013

Type: Document

Technical Report or White Paper

Does seeding after wildfires in rangelands reduce erosion or invasive species?

www.nrfirescience.org/resource/12132

Mitigation of ecological damage caused by rangeland wildfires has historically been an issue restricted to the western United States. It has focused on conservation of ecosystem function through reducing soil erosion and spread of invasive plants. Effectiveness of mitigation treatments has been debated recently. We reviewed recent...

Author(s): David A. Pyke

Year Published: 2013
Type: Document
Book or Chapter or Journal Article, Synthesis

Introduced annual grass increases regional fire activity across the arid western USA (1980-2009)

www.nrfirescience.org/resource/12110

Non-native, invasive grasses have been linked to altered grass-fire cycles worldwide. Although a few studies have quantified resulting changes in fire activity at local scales, and many have speculated about larger scales, regional alterations to fire regimes remain poorly documented. We assessed the influence of large-scale *Bromus*...

Author(s): Jennifer Balch, Bethany A. Bradley, Carla M. D'Antonio, Jose Gomez-Dans

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

Influence of wildland fire along a successional gradient in sagebrush steppe and western juniper woodlands

www.nrfirescience.org/resource/12149

Western juniper (*Juniperus occidentalis* Hook. var. *occidentalis*) has been expanding into sagebrush (*Artemisia* L. spp.) steppe over the past 130 years in Idaho, Oregon, and California. Fuel characteristics and expected fire behavior and effects change as sagebrush steppe transitions into juniper woodlands. Little is currently known...

Author(s): Eva K. Strand, Stephen C. Bunting, Robert F. Keefe

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

***Betula occidentalis* (water birch)**

www.nrfirescience.org/resource/10582

This FEIS species review synthesizes information on the relationship of *Betula occidentalis* (water birch) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Corey L. Gucker

Year Published: 2012

Type: Document

Synthesis

***Ranunculus glaberrimus* (sagebrush buttercup)**

www.nrfirescience.org/resource/10794

This FEIS species review synthesizes information on the relationship of *Ranunculus glaberrimus* (sagebrush buttercup) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Rachelle Meyer

Year Published: 2012

Type: Document

Synthesis

Measurements of convective and radiative heating in wildland fires

www.nrfirescience.org/resource/8374

Time-resolved irradiance and convective heating and cooling of fast-response thermopile sensors were measured in 13 natural and prescribed wildland fires under a variety of fuel and ambient conditions. It was shown that a sensor exposed to the fire environment was subject to rapid fluctuations of convective transfer whereas...

Author(s): David Frankman, Brent W. Webb, Bret W. Butler, Daniel M. Jimenez, Jason M. Forthofer, Paul Sopko, Kyle S. Shannon, J. Kevin Hiers, Roger D. Ottmar

Year Published: 2012

Type: Document

Book or Chapter or Journal Article

Landscape composition in aspen woodlands under various modeled fire regimes

www.nrfirescience.org/resource/12114

Quaking aspen (*Populus tremuloides*) is declining across the western United States. Aspen habitats are diverse plant communities in this region and loss of these habitats can cause shifts in biodiversity, productivity, and hydrology across spatial scales. Western aspen occurs on the majority of sites seral to conifer species, and...

Author(s): Eva K. Strand, Stephen C. Bunting, Lee A. Vierling

Year Published: 2012

Type: Document

Conference Proceedings

Assessing the success of postfire reseeding in semiarid rangelands using terra MODIS

www.nrfirescience.org/resource/11489

Successful post-fire reseeding efforts may aid rangeland ecosystem recovery by rapidly establishing a desired plant community and thereby reducing the likelihood of infestation by invasive plants. While the success of post-fire remediation is critical, few efforts have been made to leverage existing geospatial technologies to...

Author(s): Fang Chen, Keith T. Weber, John L. Schnase

Year Published: 2012

Type: Document

Book or Chapter or Journal Article

Spatial scaling of wildland fuels for six forest and rangeland ecosystems of the Northern Rocky Mountains, USA

www.nrfirescience.org/resource/8355

Wildland fuels are important to fire managers because they can be manipulated to achieve management goals, such as restoring ecosystems, decreasing fire intensity, minimizing plant mortality, and reducing erosion. However, it is difficult to accurately measure, describe, and map wildland fuels because of the great variability of...

Author(s): Robert E. Keane, Kathy L. Gray, Valentina Bacciu, Signe B. Leirfallom

Year Published: 2012

Type: Document

Book or Chapter or Journal Article

Cornus sericea (red-osier dogwood)

www.nrfirescience.org/resource/10629

This FEIS species review synthesizes information on the relationship of *Cornus sericea* (red-osier dogwood) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Corey L. Gucker
Year Published: 2012
Type: Document
Synthesis

A common-garden study of resource-island effects on a native and an exotic, annual grass after fire

www.nrfirescience.org/resource/11474

Plant-soil variation related to perennial-plant resource islands (coppices) interspersed with relatively bare interspaces is a major source of heterogeneity in desert rangelands. Our objective was to determine how native and exotic grasses vary on coppice mounds and interspaces (microsites) in unburned and burned sites and...

Author(s): Amber N. Hoover, Matthew J. Germino
Year Published: 2012
Type: Document
Book or Chapter or Journal Article

Toxicodendron radicans, Toxicodendron rydbergii (eastern poison-ivy, western poison-ivy)

www.nrfirescience.org/resource/10525

This FEIS species review synthesizes information on the relationship of Toxicodendron radicans, Toxicodendron rydbergii (eastern poison-ivy, western poison-ivy) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on...

Author(s): Robin J. Innes
Year Published: 2012
Type: Document
Synthesis

Odocoileus hemionus (mule deer)

www.nrfirescience.org/resource/10521

This FEIS species review synthesizes information on the relationship of Odocoileus hemionus (mule deer) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Robin J. Innes
Year Published: 2012
Type: Document
Synthesis

Postfire downy brome (Bromus tectorum) invasion at high elevations in Wyoming

www.nrfirescience.org/resource/12122

The invasive annual grass downy brome is the most ubiquitous weed in sagebrush systems of western North America. The center of invasion has largely been the Great Basin region, but there is an increasing abundance and distribution in the Rocky Mountain States. We evaluated postfire vegetation change using very large-scale aerial (...)

Author(s): Brian A. Meador, Samuel Cox, D. Terrance Booth
Year Published: 2012
Type: Document
Book or Chapter or Journal Article

Salix amygdaloides (peachleaf willow)

www.nrfirescience.org/resource/10658

This FEIS species review synthesizes information on the relationship of Salix amygdaloides (peachleaf willow) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Janet L. Fryer

Year Published: 2012

Type: Document

Synthesis

Fire effects on the spatial patterning of soil properties in sagebrush steppe, USA: a meta-analysis

www.nrfirescience.org/resource/11484

Understanding effects of changes in ecological disturbance regimes on soil properties, and capacity of soil properties to resist disturbance, is important for assessing ecological condition. In this meta-analysis, we examined the resilience of surface soil properties and their spatial patterning to disturbance by fire in sagebrush...

Author(s): Joel B. Sankey, Temuulen T. Sankey, Matthew J. Germino

Year Published: 2012

Type: Document

Book or Chapter or Journal Article, Synthesis

Quantifying the threat of unsuppressed wildfires reaching the adjacent wildland-urban interface on the Bridger-Teton National Forest, Wyoming, USA

www.nrfirescience.org/resource/8349

An important objective for many federal land management agencies is to restore fire to ecosystems that have experienced fire suppression or exclusion over the last century. Managing wildfires for resource objectives (i.e., allowing wildfires to burn in the absence of suppression) is an important tool for restoring such fire-adapted...

Author(s): Joe H. Scott, Don Helmbrecht, Sean A. Parks, Carol Miller

Year Published: 2012

Type: Document

Book or Chapter or Journal Article

Fire, plant invasions, and erosion events on western rangelands

www.nrfirescience.org/resource/8290

Millions of hectares of rangeland in the western United States have been invaded by annual and woody plants that have increased the role of wildland fire. Altered fire regimes pose significant implications for runoff and erosion. In this paper we synthesize what is known about fire impacts on rangeland hydrology and erosion, and how...

Author(s): Frederick B. Pierson, Christopher Jason Williams, Stuart P. Hardegree, Mark A. Weltz, Jeffrey J. Stone, Patrick E. Clark

Year Published: 2011

Type: Document

Book or Chapter or Journal Article

Cervus elaphus (elk)

www.nrfirescience.org/resource/10523

This FEIS species review synthesizes information on the relationship of Cervus elaphus (elk) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire

management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general...

Author(s): Robin J. Innes

Year Published: 2011

Type: Document

Synthesis

Quercus macrocarpa (bur oak)

www.nrfirescience.org/resource/10669

This FEIS species review synthesizes information on the relationship of *Quercus macrocarpa* (bur oak) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Corey L. Gucker

Year Published: 2011

Type: Document

Synthesis

Plant community and soil environment response to summer fire in the northern Great Plains

www.nrfirescience.org/resource/8270

Fire is an important process in many ecosystems, especially grasslands. However, documentation of plant community and soil environment responses to fire is limited for semiarid grasslands relative to that for mesic grasslands. Replicated summer fire research is lacking but necessary because summer is the natural fire season and the...

Author(s): Lance T. Vermeire, Jessica L. Crowder, David B. Wester

Year Published: 2011

Type: Document

Book or Chapter or Journal Article

Wind erosion of soils burned by wildfire

www.nrfirescience.org/resource/11492

Wind erosion and aeolian transport processes are largely unstudied in the post-wildfire environment, but recent studies have shown that wind erosion can play a major role in burned landscapes. A wind erosion monitoring system was installed immediately following a wildfire in southeastern Idaho, USA to measure wind erosion from the...

Author(s): Natalie S. Wagenbrenner, Matthew J. Germino, Brian K. Lamb, Randy B. Foltz, Peter R. Robichaud

Year Published: 2011

Type: Document

Conference Proceedings

Amorpha canescens (leadplant)

www.nrfirescience.org/resource/10659

This FEIS species review synthesizes information on the relationship of *Amorpha canescens* (leadplant) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Janet L. Fryer

Year Published: 2011

Type: Document

Synthesis

Fire effects on the cheatgrass seed bank pathogen *Pyrenophora semeniperda*

www.nrfirescience.org/resource/11450

The generalist fungal pathogen *Pyrenophora semeniperda* occurs primarily in cheatgrass (*Bromus tectorum*) seed banks, where it causes high mortality. We investigated the relationship between this pathogen and its cheatgrass host in the context of fire, asking whether burning would facilitate host escape from the pathogen or increase...

Author(s): Julie Beckstead, Laura E. Street, Susan E. Meyer, Phil S. Allen

Year Published: 2011

Type: Document

Book or Chapter or Journal Article

Guide for quantifying post-treatment fuels in the sagebrush steppe and juniper woodlands of the Great Basin

www.nrfirescience.org/resource/11108

Invasive species and woodland encroachment have caused extensive changes in the fire regimes of sagebrush steppe over the past 150 years. Land managers and resource specialists of the Great Basin are increasingly required to implement vegetation treatments to maintain habitat, reduce fire risk and restore landscapes to a more...

Author(s): Andrea Bourne, Stephen C. Bunting

Year Published: 2011

Type: Document

Research Brief or Fact Sheet

***Muhlenbergia racemosa* (green muhly)**

www.nrfirescience.org/resource/10939

This FEIS species review synthesizes information on the relationship of *Muhlenbergia racemosa* (green muhly) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Kristin L. Zouhar

Year Published: 2011

Type: Document

Synthesis

***Euphorbia esula* (leafy spurge)**

www.nrfirescience.org/resource/10451

This FEIS species review synthesizes information on the relationship of *Euphorbia esula* (leafy spurge) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Corey L. Gucker

Year Published: 2011

Type: Document

Synthesis

***Antennaria parvifolia* (littleleaf pussytoes)**

www.nrfirescience.org/resource/10657

This FEIS species review synthesizes information on the relationship of *Antennaria parvifolia* (littleleaf pussytoes) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire

regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Janet L. Fryer

Year Published: 2011

Type: Document

Synthesis

A regional experiment to evaluate effects of fire and fire surrogate treatments in the sagebrush biome - Final Report to the Joint Fire Science Program

www.nrfirescience.org/resource/11225

SageSTEP is a comprehensive regional experiment that provides critical information to managers faced with a sagebrush steppe ecosystem that is increasingly at risk from wildfire, invasive plants, and climate change. The experiment provides managers with information that can be used to restore ecological communities across the 100+...

Author(s): James D. Mclver, Hugh Barrett, Mark W. Brunson, Stephen C. Bunting, Jeanne C. Chambers, Carla M. D'Antonio, Paul S. Doescher, Dale Johnson, Sherm Karl, Steve Knick, Richard F. Miller, Michael L. Pellant, Frederick B. Pierson, David A. Pyke, Kimberly Rollins, Bruce A. Roundy, Eugene Schupp, Robin J. Tausch, David Turner, Michael J. Wisdom

Year Published: 2011

Type: Document

Technical Report or White Paper

Using native annual plant species to suppress weedy invasive species in post-fire habitats - Final Report to the Joint Fire Science Program

www.nrfirescience.org/resource/11467

Increasing fire frequencies and uncharacteristic severe fires have created a need for improved restoration methods across rangelands in western North America. Traditional restoration seed mixtures of perennial mid- to late-seral plant species may not be suitable for intensely burned sites that have been returned to an early-seral...

Author(s): Mark W. Paschke, Paul J. Meiman, William H. Romme, Cynthia S. Brown

Year Published: 2011

Type: Document

Technical Report or White Paper

Bonasa umbellus (ruffed grouse)

www.nrfirescience.org/resource/10793

This FEIS species review synthesizes information on the relationship of *Bonasa umbellus* (ruffed grouse) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Rachelle Meyer

Year Published: 2011

Type: Document

Synthesis

Economic and social impacts of wildfires and invasive plants in American deserts: lessons from the Great Basin

www.nrfirescience.org/resource/11463

Research on the impacts of wildfire and invasive plants in rangelands has focused on biophysical rather than human dimensions of these environmental processes. We offer a synthetic perspective on economic and social aspects of wildfire and invasive plants in American deserts, focusing on the Great

Basin because greater research...
Author(s): Mark W. Brunson, John A. Tanaka
Year Published: 2011
Type: Document
Book or Chapter or Journal Article, Synthesis

Assessing the susceptibility of semiarid rangelands to wildfires using Terra MODIS and Landsat Thematic Mapper data

www.nrfirescience.org/resource/11461

In order to monitor wildfires at broad spatial scales and with frequent periodicity, satellite remote sensing techniques have been used in many studies. Rangeland susceptibility to wildfires closely relates to accumulated fuel load. The normalised difference vegetation index (NDVI) and fraction of photosynthetically active radiation...

Author(s): Fang Chen, Keith T. Weber, Jamey Anderson, Bhushan Gokhal
Year Published: 2011
Type: Document
Book or Chapter or Journal Article

Alnus incana, Alnus incana subsp. rugosa, Alnus incana subsp. tenuifolia (gray alder, speckled alder, thinleaf alder)

www.nrfirescience.org/resource/10660

This FEIS species review synthesizes information on the relationship of *Alnus incana*, *Alnus incana* subsp. *rugosa*, *Alnus incana* subsp. *tenuifolia* (gray alder, speckled alder, thinleaf alder) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations....

Author(s): Janet L. Fryer
Year Published: 2011
Type: Document
Synthesis

Fire effects on the mobilization and uptake of nitrogen by cheatgrass (*Bromus tectorum* L.)

www.nrfirescience.org/resource/11453

Cheatgrass (*Bromus tectorum* L.), an invasive annual grass, is displacing native species and causing increased fire frequency in the Great Basin of the southwestern United States. Growth and nitrogen uptake patterns by cheatgrass were examined in a greenhouse study using soils from sites with the same soil type but different fire...

Author(s): Brittany G. Johnson, Dale W. Johnson, Jeanne C. Chambers, Robert R. Blank
Year Published: 2011
Type: Document
Book or Chapter or Journal Article

Ranching, invasive annual grasses, and the external costs of wildfire in the Great Basin: a stochastic dynamic programming approach

www.nrfirescience.org/resource/11468

The spread of invasive annual grasses and resulting escalation of wildfire frequency and severity pose a significant and growing threat to the economic and ecological viability of the rangelands in the Great Basin. While private ranchers have the option to limit the severity of wildfires through fuels removal treatments, few...

Author(s): Mimako Kobayashi, Michael H. Taylor
Year Published: 2010
Type: Document

Experimental measurements during combustion of moist individual foliage samples

www.nrfirescience.org/resource/11434

Individual samples of high moisture fuels from the western and southern United States and humidified aspen excelsior were burned over a flat-flame burner at $987^{\circ} \pm 12^{\circ}\text{C}$ and $10 \pm 0.5 \text{ mol\% O}_2$. Time-dependent mass and temperature profiles of these samples were obtained and analysed. It was observed that significant amounts of...

Author(s): Brent M. Pickett, Carl Isackson, Rebecca Wunder, Thomas H. Fletcher, Bret W. Butler, David R. Weise

Year Published: 2010

Type: Document

Book or Chapter or Journal Article

Late-Holocene relationships among fire, climate and vegetation in a forest-sagebrush ecotone of southwestern Idaho, USA

www.nrfirescience.org/resource/11466

The forest-sagebrush ecotone is characterized by a more arid climate than forested regions; therefore, establishing fire histories using traditional methods (e.g. fire-scars from trees, charcoal in lake sediments) is problematic. This study uses radiocarbon dating of charcoal preserved in alluvial deposits to reconstruct a record of...

Author(s): Nathan A. Nelson, Jennifer L. Pierce

Year Published: 2010

Type: Document

Book or Chapter or Journal Article

Effect of fire on a seed bank pathogen and on seeds of its host *Bromus tectorum*

www.nrfirescience.org/resource/11462

The generalist pathogen *Pyrenophora semeniperda* (Brittlebank and Adam) Shoemaker occurs primarily in cheatgrass (*Bromus tectorum* L.) seed banks, where it causes high seed mortality (Beckstead et al. 2007; Meyer et al. 2007). How does fire impact survival of a fungal seed pathogen, *P. semeniperda*, versus survival of the seeds of its...

Author(s): Julie Beckstead, Susan E. Meyer, Laura E. Street, Phil S. Allen

Year Published: 2010

Type: Document

Conference Proceedings

***Linanthus pungens* (granite prickly-phlox)**

www.nrfirescience.org/resource/10520

This FEIS species review synthesizes information on the relationship of *Linanthus pungens* (granite prickly-phlox) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Robin J. Innes

Year Published: 2010

Type: Document

Synthesis

***Prunus americana* (American plum)**

www.nrfirescience.org/resource/10661

This FEIS species review synthesizes information on the relationship of *Prunus americana* (American plum) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Janet L. Fryer

Year Published: 2010

Type: Document

Synthesis

Melilotus alba, Melilotus officinalis (white sweetclover, yellow sweetclover)

www.nrfirescience.org/resource/10456

This FEIS species review synthesizes information on the relationship of *Melilotus alba*, *Melilotus officinalis* (white sweetclover, yellow sweetclover) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is...

Author(s): Corey L. Gucker

Year Published: 2010

Type: Document

Synthesis

Schedonorus pratensis (meadow fescue)

www.nrfirescience.org/resource/10472

This FEIS species review synthesizes information on the relationship of *Schedonorus pratensis* (meadow fescue) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): Katharine R. Stone

Year Published: 2010

Type: Document

Synthesis

Holodiscus discolor (oceanspray)

www.nrfirescience.org/resource/10653

This FEIS species review synthesizes information on the relationship of *Holodiscus discolor* (oceanspray) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Janet L. Fryer

Year Published: 2010

Type: Document

Synthesis

Falco peregrinus (peregrine falcon)

www.nrfirescience.org/resource/10748

This FEIS species review synthesizes information on the relationship of *Falco peregrinus* (peregrine falcon) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Peggy Luensmann

Year Published: 2010

Type: Document

Synthesis

Holodiscus dumosus (rockspirea)

www.nrfirescience.org/resource/10648

This FEIS species review synthesizes information on the relationship of *Holodiscus dumosus* (rockspirea) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Janet L. Fryer

Year Published: 2010

Type: Document

Synthesis

Populus alba, Populus x canescens, Populus x heimburgeri, Populus x rouleauiana, Populus x tomentosa (white poplar, gray poplar, Heimbürger's poplar, Roulwau's poplar, Chinese white poplar)

www.nrfirescience.org/resource/10457

This FEIS species review synthesizes information on the relationship of *Populus alba*, *Populus x canescens*, *Populus x heimburgeri*, *Populus x rouleauiana*, *Populus x tomentosa* (white poplar, gray poplar, Heimbürger's poplar, Roulwau's poplar, Chinese white poplar) to fire--how fire affects the species and its habitat, invasiveness of...

Author(s): Corey L. Gucker

Year Published: 2010

Type: Document

Synthesis

Euphorbia cyparissias (cypress spruce)

www.nrfirescience.org/resource/10455

This FEIS species review synthesizes information on the relationship of *Euphorbia cyparissias* (cypress spruce) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): Corey L. Gucker

Year Published: 2010

Type: Document

Synthesis

Polygonum aviculare (prostrate knotweed)

www.nrfirescience.org/resource/10471

This FEIS species review synthesizes information on the relationship of *Polygonum aviculare* (prostrate knotweed) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species'...

Author(s): Katharine R. Stone

Year Published: 2010

Type: Document

Synthesis

Coronilla varia (crownvetch)

www.nrfirescience.org/resource/10452

This FEIS species review synthesizes information on the relationship of *Coronilla varia* (crownvetch) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Corey L. Gucker

Year Published: 2010

Type: Document

Synthesis

Ailanthus altissima (tree-of-heaven)

www.nrfirescience.org/resource/10450

This FEIS species review synthesizes information on the relationship of *Ailanthus altissima* (tree-of-heaven) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Janet L. Fryer

Year Published: 2010

Type: Document

Synthesis

The Sagebrush Steppe Treatment Evaluation Project (SageSTEP): a test of state-and-transition theory

www.nrfirescience.org/resource/11226

The Sagebrush Steppe Treatment Evaluation Project (SageSTEP) is a comprehensive, integrated, long-term study that evaluates the ecological effects of fire and fire surrogate treatments designed to reduce fuel and to restore sagebrush (*Artemisia* spp.) communities of the Great Basin and surrounding areas. SageSTEP has several features...

Author(s): James D. McIver, Mark W. Brunson, Stephen C. Bunting, Jeanne C. Chambers, Nora Devoe, Paul S. Doescher, James B. Grace, Dale Johnson, Steve Knick, Richard F. Miller, Michael L. Pellant, Frederick B. Pierson, David A. Pyke, Kimberly Rollins, Bruce A. Roundy, Eugene Schupp, Robin J. Tausch, David Turner

Year Published: 2010

Type: Document

Technical Report or White Paper

Filling in the blanks for prescribed fire in shrublands: developing information to support improved fire planning

www.nrfirescience.org/resource/11086

By collecting information on fuel loading, fuel consumption, fuel moisture, site conditions and fire weather on fires in a variety of shrubland types, researchers are developing a fuller knowledge of shrubland fire effects. Results are being integrated into the software package CONSUME, a user-friendly software tool for predicting...

Author(s): Jake Delwiche

Year Published: 2009

Type: Document

Research Brief or Fact Sheet

***Grus canadensis*, *Grus canadensis canadensis*, *Grus canadensis nesiotis*, *Grus canadensis pratensis*, *Grus canadensis pulla*, *Grus canadensis rowani*, *Grus canadensis tabida* (sandhill crane species)**

www.nrfirescience.org/resource/10855

[Full Title: *Grus canadensis*, *Grus canadensis canadensis*, *Grus canadensis nesiotes*, *Grus canadensis pratensis*, *Grus canadensis pulla*, *Grus canadensis rowani*, *Grus canadensis tabida* (sandhill crane, lesser sandhill crane, Cuban sandhill crane, Florida sandhill crane, Mississippi sandhill crane, Canadian sandhill crane, greater...

Author(s): Katharine R. Stone

Year Published: 2009

Type: Document

Synthesis

***Festuca thurberi* (Thurber fescue)**

www.nrfirescience.org/resource/10797

This FEIS species review synthesizes information on the relationship of *Festuca thurberi* (Thurber fescue) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Rachelle Meyer

Year Published: 2009

Type: Document

Synthesis

***Muhlenbergia cuspidata* (stonyhills muhly)**

www.nrfirescience.org/resource/10652

This FEIS species review synthesizes information on the relationship of *Muhlenbergia cuspidata* (stonyhills muhly) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Janet L. Fryer

Year Published: 2009

Type: Document

Synthesis

***Carex inops* subsp. *heliophila*, *Carex inops* subsp. *inops* (sun sedge, long-stolon sedge)**

www.nrfirescience.org/resource/10649

This FEIS species review synthesizes information on the relationship of *Carex inops* subsp. *heliophila*, *Carex inops* subsp. *inops* (sun sedge, long-stolon sedge) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations.

Information is also provided on...

Author(s): Janet L. Fryer

Year Published: 2009

Type: Document

Synthesis

***Potentilla hippiana* (woolly cinquefoil)**

www.nrfirescience.org/resource/10792

This FEIS species review synthesizes information on the relationship of *Potentilla hippiana* (woolly cinquefoil) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Rachelle Meyer

Year Published: 2009

Type: Document

Synthesis

Isatis tinctoria (dyer's woad)

www.nrfirescience.org/resource/10498

This FEIS species review synthesizes information on the relationship of *Isatis tinctoria* (dyer's woad) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Kristin L. Zouhar

Year Published: 2009

Type: Document

Synthesis

Tanacetum vulgare (common tansy)

www.nrfirescience.org/resource/10453

This FEIS species review synthesizes information on the relationship of *Tanacetum vulgare* (common tansy) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Corey L. Gucker

Year Published: 2009

Type: Document

Synthesis

Variable impacts of imazapic rate on downy brome (*Bromus tectorum*) and seeded species in two rangeland communities

www.nrfirescience.org/resource/8332

The herbicide imazapic is registered for use on rangelands and provides effective short-term control of certain invasive annual grasses. However, details about optimal application rates for downy brome and susceptibility of simultaneously seeded species are lacking. Thus, we investigated downy brome and seeded species responses to...

Author(s): Christo Morris, Thomas A. Monaco, Craig W. Rigby

Year Published: 2009

Type: Document

Book or Chapter or Journal Article

Artemisia papposa (Owyhee sagebrush)

www.nrfirescience.org/resource/10799

This FEIS species review synthesizes information on the relationship of *Artemisia papposa* (Owyhee sagebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Rachelle Meyer

Year Published: 2009

Type: Document

Synthesis

Artemisia nova (black sagebrush)

www.nrfirescience.org/resource/10650

This FEIS species review synthesizes information on the relationship of *Artemisia nova* (black

sagebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Janet L. Fryer

Year Published: 2009

Type: Document

Synthesis

From the ground up, way up: measuring live fuel moisture with satellite imagery to fine-tune fire modeling in western ecosystems

www.nrfirescience.org/resource/11431

Remote sensing from space may well become one of the world's most effective, accurate, and efficient ways to assess fire risk and thus manage large landscapes. The technology is evolving quickly, and researchers are busy keeping up. Some major western U.S. landscapes are just now being assessed for integrating remote sensing data with...

Author(s): Rachel Clark

Year Published: 2009

Type: Document

Research Brief or Fact Sheet

Recovery of greater sage-grouse habitat features in Wyoming big sagebrush following prescribed fire

www.nrfirescience.org/resource/12127

The ability of prescribed fire to enhance habitat features for Greater Sage-Grouse (*Centrocercus urophasianus*) in Wyoming big sagebrush (*Artemisia tridentata wyomingensis*) in western North America is poorly understood. We evaluated recovery of habitat features important to wintering, nesting, and early brood-rearing Sage-Grouse in...

Author(s): Jeffrey L. Beck, John W. Connelly, Kerry P. Reese

Year Published: 2009

Type: Document

Book or Chapter or Journal Article

Guide for quantifying fuels in the sagebrush steppe and juniper woodlands of the Great Basin

www.nrfirescience.org/resource/11107

Prescribed fire is increasingly used for fuels management and ecosystem restoration. Managers and fuels specialists of the Great Basin are often required to estimate fuel loadings to predict fire behavior, recommend fuel treatments, or restore an area to its natural fire regime. Because of invasive species and woodland encroachment...

Author(s): Andrea Stebleton, Stephen C. Bunting

Year Published: 2009

Type: Document

Research Brief or Fact Sheet

Climate change impacts on northwestern and intermountain United States rangelands

www.nrfirescience.org/resource/8327

Our focus is on the Pacific Northwest and Intermountain Region including the Great Basin, Columbia Plateau, Colorado Plateau, and surrounding areas. The climate of this large, arid to semiarid region is defined by generally low and highly variable precipitation. Much of the yearly precipitation arrives as winter snow because most of...

Author(s): Jeanne C. Chambers, Michael L. Pellant

Year Published: 2008

Type: Document
Book or Chapter or Journal Article

Soil water repellency and infiltration in coarse-textured soils of burned and unburned sagebrush ecosystems

www.nrfirescience.org/resource/11424

Millions of dollars are spent each year in the United States to mitigate the effects of wildfires and reduce the risk of flash floods and debris flows. Research from forested, chaparral, and rangeland communities indicate that severe wildfires can cause significant increases in soil water repellency resulting in increased runoff and...

Author(s): Frederick B. Pierson, Peter R. Robichaud, Corey A. Moffet, Kenneth E. Spaeth, Christopher Jason Williams, Stuart P. Hardegree, Patrick E. Clark

Year Published: 2008

Type: Document
Book or Chapter or Journal Article

Carex rossii (Ross's sedge)

www.nrfirescience.org/resource/10594

This FEIS species review synthesizes information on the relationship of *Carex rossii* (Ross's sedge) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Michelle B. Anderson

Year Published: 2008

Type: Document
Synthesis

Very Large Scale Aerial (VLSA) imagery for assessing postfire bitterbrush recovery

www.nrfirescience.org/resource/11024

Very large scale aerial (VLSA) imagery is an efficient tool for monitoring bare ground and cover on extensive rangelands. This study was conducted to determine whether VLSA images could be used to detect differences in antelope bitterbrush (*Purshia tridentata* Pursh DC) cover and density among similar ecological sites with varying...

Author(s): Corey A. Moffet, J. Bret Taylor, D. Terrance Booth

Year Published: 2008

Type: Document
Conference Proceedings

Big changes in the Great Basin

www.nrfirescience.org/resource/12131

JFSP-funded researchers are exploring the ecological functioning of sagebrush-steppe communities in the Great Basin and other places in the dry Intermountain West. Their work is helping managers effectively use tools such as tree mastication and prescribed fire to help these communities become more resilient in the face of invasive...

Author(s): Gail Wells

Year Published: 2008

Type: Document
Research Brief or Fact Sheet

The response of Thurber's needlegrass to fall prescribed burning

www.nrfirescience.org/resource/11454

Thurber's needlegrass (*Achnatherum thurberianum* [Piper] Barkworth) is an important component of many sagebrush communities in the Intermountain West. Prescribed fall burning is often implemented in sagebrush plant communities to mimic historic wildfires, improve wildlife habitat, and increase livestock forage production. Burning is...

Author(s): Kirk W. Davies, Jonathan D. Bates

Year Published: 2008

Type: Document

Book or Chapter or Journal Article

Nucifraga columbiana (Clark's nutcracker)

www.nrfirescience.org/resource/10782

This FEIS species review synthesizes information on the relationship of *Nucifraga columbiana* (Clark's nutcracker) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Nancy E. McMurray

Year Published: 2008

Type: Document

Synthesis

Postfire recovery of sagebrush communities: assessment using spot-5 and very large-scale aerial imagery

www.nrfirescience.org/resource/8278

Much interest lies in long-term recovery rates of sagebrush communities after fire in the western United States, as sagebrush communities comprise millions of hectares of rangelands and are an important wildlife habitat. Little is known about postfire changes in sagebrush canopy cover over time, especially at a landscape scale. We...

Author(s): Temuulen T. Sankey, Corey A. Moffet, Keith T. Weber

Year Published: 2008

Type: Document

Book or Chapter or Journal Article

Zuckia brandegeei (siltbush)

www.nrfirescience.org/resource/10667

This FEIS species review synthesizes information on the relationship of *Zuckia brandegeei* (siltbush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Corey L. Gucker

Year Published: 2008

Type: Document

Synthesis

Potentilla glandulosa (sticky cinquefoil)

www.nrfirescience.org/resource/10822

This FEIS species review synthesizes information on the relationship of *Potentilla glandulosa* (sticky cinquefoil) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Sonja L. Reeves

Year Published: 2008

Type: Document

Synthesis

Cheatgrass and red brome; the history and biology of two invaders

www.nrfirescience.org/resource/11023

In recent history, there has not been a more ecologically important event than the introduction of cheatgrass (*Bromus tectorum*) and red brome (*Bromus rubens*) into the Intermountain West. These grasses are very similar in ecology and history and are separated mostly by function of elevation. Both species are from the Mediterranean...

Author(s): Chad R. Reid, Sherel Goodrich, James E. Bowns

Year Published: 2008

Type: Document

Conference Proceedings

Climate change effects on historical range and variability of two large landscapes in western Montana, USA

www.nrfirescience.org/resource/8162

Quantifying the historical range and variability of landscape composition and structure using simulation modeling is becoming an important means of assessing current landscape condition and prioritizing landscapes for ecosystem restoration. However, most simulated time series are generated using static climate conditions which fail...

Author(s): Robert E. Keane, Lisa M. Holsinger, Russell A. Parsons, Kathy L. Gray

Year Published: 2008

Type: Document

Book or Chapter or Journal Article

Trout Creek 1999 Burn

www.nrfirescience.org/resource/11478

A small prescribed fire near the mouth of Trout Creek in Strawberry Valley, Wasatch County, Utah, on the Uinta National Forest provided an opportunity to compare production and vascular plant composition in unburned and burned areas. At four years post burn, production of herbaceous plants was about four times greater in the burned...

Author(s): Sherel Goodrich

Year Published: 2008

Type: Document

Conference Proceedings

Sanguisorba minor (small burnet)

www.nrfirescience.org/resource/10656

This FEIS species review synthesizes information on the relationship of *Sanguisorba minor* (small burnet) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Janet L. Fryer

Year Published: 2008

Type: Document

Synthesis

Emissions of levoglucosan, methoxy pehnols, and organic acids from prescribed burns,

laboratory combustion of wildland fuels, and residential wood combustion

www.nrfirescience.org/resource/11426

Biomass combustion emissions make a significant contribution to the overall particulate pollution in the troposphere. Wildland or prescribed burns and residential wood combustion emissions can vary due to differences in fuel, season, time of day, and the nature of the combustion. Inadequate understanding of the relevance of these...

Author(s): Lynn R. Mazzoleni, Barbara Zielinska, Hans Moosmuller

Year Published: 2007

Type: Document

Book or Chapter or Journal Article

Artemisia campestris (field sagewort)

www.nrfirescience.org/resource/10675

This FEIS species review synthesizes information on the relationship of Artemisia campestris (field sagewort) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Corey L. Gucker

Year Published: 2007

Type: Document

Synthesis

Neotoma cinerea (bushy-tailed woodrat)

www.nrfirescience.org/resource/10902

This FEIS species review synthesizes information on the relationship of Neotoma cinerea (bushy-tailed woodrat) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Elena D. Ulev

Year Published: 2007

Type: Document

Synthesis

Recovery of big sagebrush following fire in southwest Montana

www.nrfirescience.org/resource/8279

Fire plays a large role in structuring sagebrush ecosystems; however, we have little knowledge of how vegetation changes with time as succession proceeds from immediate postfire to mature stands. We sampled at 38 sites in southwest Montana dominated by 3 subspecies of big sagebrush (*Artemisia tridentata* Nutt.). At each site we...

Author(s): Peter Lesica, Stephen V. Cooper, Greg Kudray

Year Published: 2007

Type: Document

Book or Chapter or Journal Article

Modeling erosion on steep sagebrush rangeland before and after prescribed fire - proceedings

www.nrfirescience.org/resource/11481

Fire in sagebrush rangelands significantly alters canopy cover, ground cover, and soil properties that influence runoff and erosion processes. Runoff is generated more quickly and a larger volume of runoff is produced following prescribed fire. The result is increased risk of severe erosion and downstream flooding. The Water Erosion...

Author(s): Corey A. Moffet, Frederick B. Pierson, Kenneth E. Spaeth

Year Published: 2007
Type: Document
Conference Proceedings

Photographic handbook for comparing burned and unburned sites within a dry forested and grassland mosaic: a tool for communication, calibration, and monitoring post-fire effects

www.nrfirescience.org/resource/11237

This photograph handbook describes characteristics and burn severity of a dry forested and grassland mosaic that burned within the last decade. We show photographs of different burned and unburned sites to help compare fire occurrence in similar stands. The handbook provides local land managers with a quick, inexpensive, and...

Author(s): Theresa B. Jain, Molly Juillerat, Jonathan Sandquist, Mike Ford, Brad Sauer, Robert J. Mitchell, Scott McAvoy, Justin Hanley, Jon David

Year Published: 2007

Type: Document

Technical Report or White Paper

Poa bulbosa (bulbous bluegrass)

www.nrfirescience.org/resource/10682

This FEIS species review synthesizes information on the relationship of *Poa bulbosa* (bulbous bluegrass) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Corey L. Gucker

Year Published: 2007

Type: Document

Synthesis

Stereo photo series for quantifying natural fuels. Volume X: sagebrush with grass and ponderosa pine-juniper types in central Montana

www.nrfirescience.org/resource/11191

A series of single and stereo photographs displaying a range of natural conditions and fuel loadings in sagebrush with grass and ponderosa pine-juniper types in central Montana. Each group of photos includes inventory data summarizing vegetation composition, structure, and loading: woody material loading and density by size class;...

Author(s): Roger D. Ottmar, Robert E. Vihnanek, Clinton S. Wright

Year Published: 2007

Type: Document

Technical Report or White Paper

Mustela nigripes (black-footed ferret)

www.nrfirescience.org/resource/10903

This FEIS species review synthesizes information on the relationship of *Mustela nigripes* (black-footed ferret) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Elena D. Ulev

Year Published: 2007

Type: Document

Synthesis

Fuel consumption and flammability thresholds in shrub-dominated ecosystems - Final Report to the Joint Fire Science Program

www.nrfirescience.org/resource/11164

Research to quantify fuel consumption and flammability in shrub-dominated ecosystems has received little attention despite the widespread occurrence of fire-influenced, shrub-dominated landscapes across the arid lands of the western United States. While some research has addressed issues relating to fire behavior in some shrub-...

Author(s): Clinton S. Wright, Roger D. Ottmar, Sue A. Ferguson, Robert E. Vihnanek

Year Published: 2007

Type: Document

Technical Report or White Paper

Modeling soil erosion on steep sagebrush rangeland before and after prescribed fire

www.nrfirescience.org/resource/11425

Fire in sagebrush rangelands significantly alters canopy cover, ground cover, and soil properties which influence runoff and erosion processes. Runoff can be generated more quickly and in larger volume following fire resulting in increased risk of severe erosion and downstream flooding. The Water Erosion Prediction Project (WEPP)...

Author(s): Corey A. Moffet, Frederick B. Pierson, Peter R. Robichaud, Kenneth E. Spaeth, Stuart P. Hardegree

Year Published: 2007

Type: Document

Book or Chapter or Journal Article

Cynomys ludovicianus (black-tailed prairie dog)

www.nrfirescience.org/resource/10898

This FEIS species review synthesizes information on the relationship of *Cynomys ludovicianus* (black-tailed prairie dog) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution,...

Author(s): Elena D. Ulev

Year Published: 2007

Type: Document

Synthesis

Sphaeralcea grossulariifolia (gooseberryleaf globemallow)

www.nrfirescience.org/resource/10894

This FEIS species review synthesizes information on the relationship of *Sphaeralcea grossulariifolia* (gooseberryleaf globemallow) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Jennifer E. Tollefson

Year Published: 2007

Type: Document

Synthesis

Linum lewisii (Lewis flax)

www.nrfirescience.org/resource/10815

This FEIS species review synthesizes information on the relationship of *Linum lewisii* (Lewis flax) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire

management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Sonja L. Reeves

Year Published: 2007

Type: Document

Synthesis

Postfire invasion potential of rush skeletonweed (*Chondrilla juncea*)

www.nrfirescience.org/resource/11455

North American sagebrush steppe communities have been transformed by the introduction of invasive annual grasses and subsequent increase in fire size and frequency. We examined the effects of wildfires and environmental conditions on the ability of rush skeletonweed (*Chondrilla juncea* L.), a perennial Eurasian composite, to invade...

Author(s): Cecilia Lynn Kinter, Brian A. Meador, Nancy L. Shaw, Ann L. Hild

Year Published: 2007

Type: Document

Book or Chapter or Journal Article

***Vulpia microstachys* (small sixweeks grass)**

www.nrfirescience.org/resource/10709

This FEIS species review synthesizes information on the relationship of *Vulpia microstachys* (small sixweeks grass) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Janet L. Howard

Year Published: 2006

Type: Document

Synthesis

***Cercocarpus ledifolius* (curlleaf mountain-mahogany)**

www.nrfirescience.org/resource/10678

This FEIS species review synthesizes information on the relationship of *Cercocarpus ledifolius* (curlleaf mountain-mahogany) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution,...

Author(s): Corey L. Gucker

Year Published: 2006

Type: Document

Synthesis

***Gymnorhinus cyanocephalus* (pinyon jay)**

www.nrfirescience.org/resource/10904

This FEIS species review synthesizes information on the relationship of *Gymnorhinus cyanocephalus* (pinyon jay) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Elena D. Ulev

Year Published: 2006

Type: Document

Synthesis

Zigadenus venenosus (meadow deathcamas)

www.nrfirescience.org/resource/10704

This FEIS species review synthesizes information on the relationship of *Zigadenus venenosus* (meadow deathcamas) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Alan S. Hauser

Year Published: 2006

Type: Document

Synthesis

Vulpia myuros (rattail sixweeks grass)

www.nrfirescience.org/resource/10460

This FEIS species review synthesizes information on the relationship of *Vulpia myuros* (rattail sixweeks grass) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): Janet L. Howard

Year Published: 2006

Type: Document

Synthesis

Acer grandidentatum (bigtooth maple)

www.nrfirescience.org/resource/10895

This FEIS species review synthesizes information on the relationship of *Acer grandidentatum* (bigtooth maple) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Jennifer E. Tollefson

Year Published: 2006

Type: Document

Synthesis

Prunus pumila (sand cherry)

www.nrfirescience.org/resource/10868

This FEIS species review synthesizes information on the relationship of *Prunus pumila* (sand cherry) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Jane E. Taylor

Year Published: 2006

Type: Document

Synthesis

Biomass consumption during prescribed fires in big sagebrush ecosystems

www.nrfirescience.org/resource/11419

Big sagebrush (*Artemisia tridentata*) ecosystems typically experience stand replacing fires during which some or all of the ignited biomass is consumed. Biomass consumption is directly related to the energy released during a fire, and is an important factor that determines smoke production and the effects of fire on other resources....

Author(s): Clinton S. Wright, Susan J. Prichard
Year Published: 2006
Type: Document
Conference Proceedings

Bromus carinatus var. carinatus, Bromus carinatus var. marginatus (California brome, mountain brome)

www.nrfirescience.org/resource/10893

This FEIS species review synthesizes information on the relationship of Bromus carinatus var. carinatus, Bromus carinatus var. marginatus (California brome, mountain brome) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also...

Author(s): Jennifer E. Tollefson
Year Published: 2006
Type: Document
Synthesis

Apocynum cannabinum (Indianhemp)

www.nrfirescience.org/resource/10819

This FEIS species review synthesizes information on the relationship of Apocynum cannabinum (Indianhemp) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Sonja L. Reeves
Year Published: 2006
Type: Document
Synthesis

Rosa arkansana (prairie rose)

www.nrfirescience.org/resource/10699

This FEIS species review synthesizes information on the relationship of Rosa arkansana (prairie rose) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Alan S. Hauser
Year Published: 2006
Type: Document
Synthesis

Combustion properties of Bromus tectorum L.: influence of ecotype and growth under four CO2 concentrations

www.nrfirescience.org/resource/11409

We grew from seed the exotic invasive annual grass Bromus tectorum L., collected from three elevation ecotypes in northern Nevada, USA. Plants were exposed to four CO2 atmosphere concentrations: 270, 320, 370, and 420 $\mu\text{mol mol}^{-1}$. After harvest on day 87, above-ground tissue was milled, conditioned to 30% relative humidity, and...

Author(s): Robert R. Blank, Robert H. White, Lewis H. Ziska
Year Published: 2006
Type: Document
Book or Chapter or Journal Article

Carex filifolia (threadleaf sedge)

www.nrfirescience.org/resource/10696

This FEIS species review synthesizes information on the relationship of *Carex filifolia* (threadleaf sedge) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Alan S. Hauser

Year Published: 2006

Type: Document

Synthesis

Opuntia humifusa (eastern pricklypear)

www.nrfirescience.org/resource/10863

This FEIS species review synthesizes information on the relationship of *Opuntia humifusa* (eastern pricklypear) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Jane E. Taylor

Year Published: 2006

Type: Document

Synthesis

Eleocharis palustris (common spikerush)

www.nrfirescience.org/resource/10694

This FEIS species review synthesizes information on the relationship of *Eleocharis palustris* (common spikerush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Alan S. Hauser

Year Published: 2006

Type: Document

Synthesis

Balsamorhiza hookeri (Hooker balsamroot)

www.nrfirescience.org/resource/10804

This FEIS species review synthesizes information on the relationship of *Balsamorhiza hookeri* (Hooker balsamroot) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Gregory T. Munger

Year Published: 2006

Type: Document

Synthesis

History of fire and Douglas-fir establishment in a savanna and sagebrush-grassland mosaic, southwestern Montana, USA

www.nrfirescience.org/resource/7942

Over the past century, trees have encroached into grass- and shrublands across western North America. These include Douglas-fir trees (*Pseudotsuga menziesii* (Mirb.) Franco var. *glauca* (Beissn.) Franco) encroaching into mountain big sagebrush *Nutt. ssp. vaseyana* (Rydb.) Beetle) from stable

islands of savanna in southwestern Montana....

Author(s): Emily K. Heyerdahl, Richard F. Miller, Russell A. Parsons

Year Published: 2006

Type: Document

Book or Chapter or Journal Article

Vulpia octoflora (sixweeks grass)

www.nrfirescience.org/resource/10710

This FEIS species review synthesizes information on the relationship of *Vulpia octoflora* (sixweeks grass) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Janet L. Howard

Year Published: 2006

Type: Document

Synthesis

Berberis repens (Oregon grape)

www.nrfirescience.org/resource/10905

This FEIS species review synthesizes information on the relationship of *Berberis repens* (Oregon grape) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Elena D. Ulev

Year Published: 2006

Type: Document

Synthesis

Development of initial Wildland Fire Use documentation for Charles M. Russell National Wildlife Refuge

www.nrfirescience.org/resource/11077

The Charles M. Russell National Wildlife Refuge manages ecosystems that depend on fire for their maintenance. Fire is abundant in and adjacent to the refuge where lightning and human ignitions can rapidly spread in grass and shrub fuels. Farm and ranch land which would be adversely impacted by fire, pose a significant logistical...

Author(s): Bill Clark, Doug Stephen, Pat Stephen, Laurie L. Kurth, Ken Kerr

Year Published: 2006

Type: Document

Management or Planning Document

Piranga ludoviciana (western tanager)

www.nrfirescience.org/resource/10795

This FEIS species review synthesizes information on the relationship of *Piranga ludoviciana* (western tanager) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Rachelle Meyer

Year Published: 2006

Type: Document

Synthesis

Cercocarpus montanus (true mountain-mahogany)

www.nrfirescience.org/resource/10673

This FEIS species review synthesizes information on the relationship of *Cercocarpus montanus* (true mountain-mahogany) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Corey L. Gucker

Year Published: 2006

Type: Document

Synthesis

Calamagrostis montanensis (plains reedgrass)

www.nrfirescience.org/resource/10702

This FEIS species review synthesizes information on the relationship of *Calamagrostis montanensis* (plains reedgrass) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Alan S. Hauser

Year Published: 2006

Type: Document

Synthesis

Rosa woodsii (Wood's rose)

www.nrfirescience.org/resource/10700

This FEIS species review synthesizes information on the relationship of *Rosa woodsii* (Wood's rose) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Alan S. Hauser

Year Published: 2006

Type: Document

Synthesis

Sphaeralcea coccinea (scarlet globemallow)

www.nrfirescience.org/resource/10892

This FEIS species review synthesizes information on the relationship of *Sphaeralcea coccinea* (scarlet globemallow) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Jennifer E. Tollefson

Year Published: 2006

Type: Document

Synthesis

Artemisia pedatifida (birdfoot sagebrush)

www.nrfirescience.org/resource/10864

This FEIS species review synthesizes information on the relationship of *Artemisia pedatifida* (birdfoot sagebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Jane E. Taylor
Year Published: 2006
Type: Document
Synthesis

Distichlis spicata (saltgrass)

www.nrfirescience.org/resource/10695

This FEIS species review synthesizes information on the relationship of *Distichlis spicata* (saltgrass) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Alan S. Hauser
Year Published: 2006
Type: Document
Synthesis

Integrating fuel treatments into comprehensive ecosystem management

www.nrfirescience.org/resource/10973

To plan fuel treatments in the context of comprehensive ecosystem management, forest managers must meet multiple-use and environmental objectives, address administrative and budget constraints, and reconcile performance measures from multiple policy directives. We demonstrate a multiple criteria approach to measuring success of fuel...

Author(s): Kevin D. Hyde, J. Greg Jones, Robin P. Silverstein, Keith Stockmann, Dan R. Loeffler
Year Published: 2006
Type: Document
Conference Proceedings

Geum triflorum (prairie smoke)

www.nrfirescience.org/resource/10801

This FEIS species review synthesizes information on the relationship of *Geum triflorum* (prairie smoke) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Gregory T. Munger
Year Published: 2006
Type: Document
Synthesis

Elaeagnus angustifolia (Russian-olive)

www.nrfirescience.org/resource/10486

This FEIS species review synthesizes information on the relationship of *Elaeagnus angustifolia* (Russian-olive) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): Kristin L. Zouhar
Year Published: 2005
Type: Document
Synthesis

Leucopoa kingii (spike fescue)

www.nrfirescience.org/resource/10599

This FEIS species review synthesizes information on the relationship of *Leucopoa kingii* (spike fescue) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Michelle B. Anderson

Year Published: 2005

Type: Document

Synthesis

Dalea purpurea (purple prairie clover)

www.nrfirescience.org/resource/10745

This FEIS species review synthesizes information on the relationship of *Dalea purpurea* (purple prairie clover) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Kevin R. League

Year Published: 2005

Type: Document

Synthesis

Quantitative comparison of spectral indices and transformations of multi-resolution remotely sensed data using ground measurements: implications for fire severity modeling - Final Report to the Joint Fire Science Program

www.nrfirescience.org/resource/11156

The primary factor in estimating fire danger is fuel moisture. Fuel moisture varies seasonally and should be measured over an entire fire season using remote sensing technologies and verified using ground measurements. Recent advances in spaceborne and airborne imaging systems can potentially significantly improve the ability to...

Author(s): Jennifer L. Rechel, Dar A. Roberts

Year Published: 2005

Type: Document

Technical Report or White Paper

Symphoricarpos longiflorus (longflower snowberry)

www.nrfirescience.org/resource/10790

This FEIS species review synthesizes information on the relationship of *Symphoricarpos longiflorus* (longflower snowberry) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution,...

Author(s): Jack McWilliams

Year Published: 2005

Type: Document

Synthesis

Juncus balticus (Baltic rush)

www.nrfirescience.org/resource/10701

This FEIS species review synthesizes information on the relationship of *Juncus balticus* (Baltic rush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Alan S. Hauser
Year Published: 2005
Type: Document
Synthesis

Restoring Wyoming big sagebrush

www.nrfirescience.org/resource/8420

The widespread occurrence of big sagebrush can be attributed to many adaptive features. Big sagebrush plays an essential role in its communities by providing wildlife habitat, modifying local environmental conditions, and facilitating the reestablishment of native herbs. Currently, however, many sagebrush steppe communities are...

Author(s): Cindy R. Lysne
Year Published: 2005
Type: Document
Conference Proceedings, Synthesis

Artemisia dracunculus (tarragon)

www.nrfirescience.org/resource/10665

This FEIS species review synthesizes information on the relationship of Artemisia dracunculus (tarragon) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Amy H. Groen
Year Published: 2005
Type: Document
Synthesis

Sage-grouse habitat restoration symposium proceedings

www.nrfirescience.org/resource/11007

Declines in habitat of greater sage-grouse and Gunnison sage-grouse across the western United States are related to degradation, loss, and fragmentation of sagebrush ecosystems resulting from development of agricultural lands, grazing practices, changes in wildfire regimes, increased spread of invasive species, gas and oil...

Author(s): Nancy L. Shaw, Michael L. Pellant, Stephen B. Monsen
Year Published: 2005
Type: Document
Conference Proceedings

Psathyrostachys juncea (Russian wildrye)

www.nrfirescience.org/resource/10476

This FEIS species review synthesizes information on the relationship of Psathyrostachys juncea (Russian wildrye) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species'...

Author(s): Jane E. Taylor
Year Published: 2005
Type: Document
Synthesis

Plant succession and approaches to community restoration

www.nrfirescience.org/resource/8418

The processes of vegetation change over time, or plant succession, are also the processes involved in plant community restoration. Restoration efforts attempt to use designed disturbance, seedbed preparation and sowing methods, and selection of adapted and compatible native plant materials to enhance ecological function. The large...

Author(s): Bruce A. Roundy

Year Published: 2005

Type: Document

Conference Proceedings, Synthesis

Lonicera fragrantissima, Lonicera maackii, Lonicera morrowii, Lonicera tatarica, Lonicera x bella, Lonicera xylosteum (winter honeysuckle, Amur honeysuckle, Morrow's honeysuckle, Tatarian honeysuckle, Bell's honeysuckle, European fly honeysuckle)

www.nrfirescience.org/resource/10465

This FEIS species review synthesizes information on the relationship of *Lonicera fragrantissima*, *Lonicera maackii*, *Lonicera morrowii*, *Lonicera tatarica*, *Lonicera x bella*, *Lonicera xylosteum* (winter honeysuckle, Amur honeysuckle, Morrow's honeysuckle, Tatarian honeysuckle, Bell's honeysuckle, European fly honeysuckle) to fire--how...

Author(s): Gregory T. Munger

Year Published: 2005

Type: Document

Synthesis

The potential influence of stair-step morphology on the initiation of bulking debris flows in southwestern Idaho, USA

www.nrfirescience.org/resource/11436

Hillside hollows which produced bulking debris flows in southwestern Idaho in 2003-2005 consistently show a stair-step morphology with vertical risers and planar, roughly horizontal treads. We propose a process model of step formation by plunging flow which increases sediment detachment and transport, thereby encouraging the...

Author(s): C. W. Welcker, John M. Buffington, Charles H. Luce, J. A. McKean

Year Published: 2005

Type: Document

Conference Proceedings

Big sagebrush: A sea fragmented into lakes, ponds, and puddles

www.nrfirescience.org/resource/15446

Pioneers traveling along the Oregon Trail from western Nebraska, through Wyoming and southern Idaho and into eastern Oregon, referred to their travel as an 800 mile journey through a sea of sagebrush, mainly big sagebrush (*Artemisia tridentata*). Today approximately 50 percent of the sagebrush sea has given way to agriculture, cities...

Author(s): Bruce L. Welch

Year Published: 2005

Type: Document

Technical Report or White Paper

Galium aparine (stickywilly)

www.nrfirescience.org/resource/10677

This FEIS species review synthesizes information on the relationship of *Galium aparine* (stickywilly) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic

biology, and...

Author(s): Corey L. Gucker

Year Published: 2005

Type: Document

Synthesis

Hypericum perforatum (common St Johnswort)

www.nrfirescience.org/resource/10499

This FEIS species review synthesizes information on the relationship of *Hypericum perforatum* (common St Johnswort) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species'...

Author(s): Kristin L. Zouhar

Year Published: 2005

Type: Document

Synthesis

New technology for fuel breaks and green strips in urban interface and wildland areas

www.nrfirescience.org/resource/11039

Threat from wildfire can be greatly minimized through proactive efforts that reduce and slow spread through use of green strips or fuel breaks, and decrease fire volatility by reducing fuel load. This results in greater safety to fire fighters and protection to key urban interface areas or wildlife habitat. The fight against western...

Author(s): Jennifer L. Vollmer

Year Published: 2005

Type: Document

Conference Proceedings

Seeding considerations in restoring big sagebrush habitat

www.nrfirescience.org/resource/8421

This paper describes methods of managing or seeding to restore big sagebrush communities for wildlife habitat. The focus is on three big sagebrush subspecies, Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*), basin big sagebrush (*Artemisia tridentata* ssp. *tridentata*), and mountain big sagebrush (*Artemisia tridentata*...

Author(s): Scott M. Lambert

Year Published: 2005

Type: Document

Conference Proceedings, Synthesis

Sagebrush steppe and pinyon-juniper ecosystems - effects of changing fire regimes, increased fuel loads, and invasive species - Final Report to the Joint Fire Science Program

www.nrfirescience.org/resource/11152

Pinyon-juniper woodlands and Wyoming big sagebrush ecosystems have undergone major changes in vegetation structure and composition since settlement by European Americans. These changes are resulting in dramatic shifts in fire frequency, size and severity. Effective management of these systems has been hindered by lack of information...

Author(s): Jeanne C. Chambers, E. Durant McArthur, Stephen B. Monsen, Susan E. Meyer, Nancy L. Shaw, Robin J. Tausch, Robert R. Blank, Stephen C. Bunting, Richard R. Miller, Michael L. Pellant, Bruce A. Roundy, Scott C. Walker

Year Published: 2005

Type: Document

Landscape restoration for greater sage-grouse: implications for multiscale planning and monitoring

www.nrfirescience.org/resource/8419

Habitats and populations of greater sage-grouse (*Centrocercus urophasianus*) have declined throughout western North America in response to a myriad of detrimental land uses. Successful restoration of this species' habitat, therefore, is of keen interest to Federal land agencies who oversee management of most remaining habitat. To...

Author(s): Michael J. Wisdom, Mary M. Rowland, Miles A. Hemstrom, Barbara C. Wales

Year Published: 2005

Type: Document

Conference Proceedings, Synthesis

Opuntia fragilis (brittle pricklypear)

www.nrfirescience.org/resource/10867

This FEIS species review synthesizes information on the relationship of *Opuntia fragilis* (brittle pricklypear) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Jane E. Taylor

Year Published: 2005

Type: Document

Synthesis

Yucca glauca (soapweed yucca)

www.nrfirescience.org/resource/10664

This FEIS species review synthesizes information on the relationship of *Yucca glauca* (soapweed yucca) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Amy H. Groen

Year Published: 2005

Type: Document

Synthesis

Reseeding big sagebrush: techniques and issues

www.nrfirescience.org/resource/11006

Reestablishing big sagebrush on rangelands now dominated by native perennial grasses, introduced perennial grasses, or exotic annual grasses, particularly cheatgrass (*Bromus tectorum*), serves to stabilize soil, improve moisture availability and nutrient recycling, increase biological diversity, and foster community stability and...

Author(s): Nancy L. Shaw, Ann M. DeBolt, Roger Rosentreter

Year Published: 2005

Type: Document

Conference Proceedings

Calamovilfa longifolia (prairie sandreed)

www.nrfirescience.org/resource/10697

This FEIS species review synthesizes information on the relationship of *Calamovilfa longifolia* (prairie

sandreed) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Alan S. Hauser

Year Published: 2005

Type: Document

Synthesis

Strategies to enhance plant structure and diversity in crested wheatgrass seedings

www.nrfirescience.org/resource/8417

Crested wheatgrass (*Agropyron cristatum* sensu amplo [L.] Gaertn.) is an introduced, caespitose grass that has been seeded on millions of acres of Western rangelands. In some areas, crested wheatgrass seedings overlap with critical sage-grouse (*Centrocercus urophasianus*; *C. minimus*) habitat, raising the question of how plant...

Author(s): Michael L. Pellant, Cindy R. Lysne

Year Published: 2005

Type: Document

Conference Proceedings, Synthesis

Predicting seasonal fuel moisture in the western United States using endmember fractions at multiple spatial and spectral resolutions

www.nrfirescience.org/resource/10998

Fuel moisture is one of the major components of fire risk assessment in the western United States. Regional and landscape fuel moisture estimates are currently derived from coarse resolution remotely sensed imagery without ground measurements to validate the estimates. Additionally, these estimates are determined using the...

Author(s): Jennifer L. Rechel, Seth H. Peterson, Dar A. Roberts, Jan W. van Wagendonk

Year Published: 2005

Type: Document

Conference Proceedings

Artemisia ludoviciana (prairie sage)

www.nrfirescience.org/resource/10605

This FEIS species review synthesizes information on the relationship of *Artemisia ludoviciana* (prairie sage) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Michelle B. Anderson

Year Published: 2005

Type: Document

Synthesis

Effective management strategies for sage-grouse and sagebrush: a question of triage?

www.nrfirescience.org/resource/8367

The sagebrush (*Artemisia* spp.) ecosystem once occupied over 150 million acres of western North America (Barbour and Billings 1988). The ecosystem still occupies over 100 million acres (Connelly et al. 2004, Wisdom et al. 2005), but the abundance and condition of sagebrush communities is declining rapidly in response to a variety of...

Author(s): Michael J. Wisdom, Mary M. Rowland, Robin J. Tausch

Year Published: 2005

Type: Document

Book or Chapter or Journal Article

Dry forests and wildland fires of the inland Northwest USA: contrasting the landscape ecology of the pre-settlement and modern eras

www.nrfirescience.org/resource/7941

Prior to Euro-American settlement, dry ponderosa pine and mixed conifer forests (hereafter, the 'dry forests') of the Inland Northwest were burned by frequent low- or mixed-severity fires. These mostly surface fires maintained low and variable tree densities, light and patchy ground fuels, simplified forest structure, and favored...

Author(s): Paul F. Hessburg, James K. Agee, Jerry F. Franklin

Year Published: 2005

Type: Document

Book or Chapter or Journal Article, Synthesis

Postfire seeding for erosion control: effectiveness and impacts on native plant communities

www.nrfirescience.org/resource/7911

Large, high-severity wildfires remove vegetation cover and expose mineral soil, often causing erosion and runoff during postfire rain events to increase dramatically. Land-management agencies in the United States are required to assess site conditions after wildfire and, where necessary, implement emergency watershed rehabilitation...

Author(s): Jan L. Beyers

Year Published: 2004

Type: Document

Book or Chapter or Journal Article, Synthesis

Sonchus arvensis (perennial sowthistle)

www.nrfirescience.org/resource/10464

This FEIS species review synthesizes information on the relationship of *Sonchus arvensis* (perennial sowthistle) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species'...

Author(s): Jack McWilliams

Year Published: 2004

Type: Document

Synthesis

Sarcobatus vermiculatus (black greasewood)

www.nrfirescience.org/resource/10592

This FEIS species review synthesizes information on the relationship of *Sarcobatus vermiculatus* (black greasewood) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Michelle B. Anderson

Year Published: 2004

Type: Document

Synthesis

Forbs for seeding range and wildlife habitats

www.nrfirescience.org/resource/11120

Description not entered

Author(s): Richard Stevens, Stephen B. Monsen
Year Published: 2004
Type: Document
Technical Report or White Paper

Cardaria chalapensis, Cardaria draba, Cardaria pubescens (lens-podded hoary cress, heart-podded hoary cress, globe-podded hoary cress)

www.nrfirescience.org/resource/10490

This FEIS species review synthesizes information on the relationship of *Cardaria chalapensis*, *Cardaria draba*, *Cardaria pubescens* (lens-podded hoary cress, heart-podded hoary cress, globe-podded hoary cress) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire...

Author(s): Kristin L. Zouhar
Year Published: 2004
Type: Document
Synthesis

Leymus salinus (Salina wildrye)

www.nrfirescience.org/resource/10602

This FEIS species review synthesizes information on the relationship of *Leymus salinus* (*Salina wildrye*) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Michelle B. Anderson
Year Published: 2004
Type: Document
Synthesis

Convolvulus arvensis (field bindweed)

www.nrfirescience.org/resource/10487

This FEIS species review synthesizes information on the relationship of *Convolvulus arvensis* (field bindweed) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): Kristin L. Zouhar
Year Published: 2004
Type: Document
Synthesis

Leymus ambiguus (Colorado wildrye)

www.nrfirescience.org/resource/10600

This FEIS species review synthesizes information on the relationship of *Leymus ambiguus* (Colorado wildrye) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Michelle B. Anderson
Year Published: 2004
Type: Document
Synthesis

Chondrilla juncea (rush skeletonweed)

www.nrfirescience.org/resource/10483

This FEIS species review synthesizes information on the relationship of *Chondrilla juncea* (rush skeletonweed) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): Kristin L. Zouhar

Year Published: 2004

Type: Document

Synthesis

Rhus trilobata (skunkbush sumac)

www.nrfirescience.org/resource/10596

This FEIS species review synthesizes information on the relationship of *Rhus trilobata* (skunkbush sumac) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Michelle B. Anderson

Year Published: 2004

Type: Document

Synthesis

Sorghum halepense (Johnson grass)

www.nrfirescience.org/resource/10459

This FEIS species review synthesizes information on the relationship of *Sorghum halepense* (Johnson grass) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Janet L. Howard

Year Published: 2004

Type: Document

Synthesis

Guidelines for restoration and rehabilitation of principal plant communities

www.nrfirescience.org/resource/11121

Range and wildland improvement projects conducted throughout the Intermountain region normally occur within specific plant communities. Each plant community has unique features that require different equipment, planting techniques, and plant materials to conduct improvement projects. Plant communities or associations discussed in...

Author(s): Richard Stevens, Stephen B. Monsen

Year Published: 2004

Type: Document

Technical Report or White Paper

Establishment of aerially seeded big sagebrush following southern Idaho wildfires

www.nrfirescience.org/resource/11412

In the western United States, big sagebrush (*Artemisia tridentata*) steppe communities dominate approximately 60 million ha (148 million acres) and comprise the largest vegetation type (Wambolt and Hoffman 2001). However, due to the invasion of exotic plants, fire has become a driving force in the ecology and management of sagebrush...

Author(s): Cindy R. Lysne, Michael L. Pellant

Year Published: 2004
Type: Document
Technical Report or White Paper

Basic considerations for range and wildlife revegetation and restoration

www.nrfirescience.org/resource/11118

Plummer and others (1968) proposed 10 principles to follow when planning and implementing rangeland revegetation programs. These principles - or basic considerations for rangeland managers - are applicable to most sites in the Western United States (Jordan 1981; Merkel and Herbal 1973), and many projects in the Intermountain area...

Author(s): Richard Stevens
Year Published: 2004
Type: Document
Technical Report or White Paper

Lepidium latifolium (perennial pepperweed)

www.nrfirescience.org/resource/10491

This FEIS species review synthesizes information on the relationship of *Lepidium latifolium* (perennial pepperweed) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species'...

Author(s): Kristin L. Zouhar
Year Published: 2004
Type: Document
Synthesis

Countering misinformation concerning big sagebrush

www.nrfirescience.org/resource/15448

This paper examines the scientific merits of eight axioms of range or vegetative management pertaining to big sagebrush. These axioms are: (1) Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*) does not naturally exceed 10 percent canopy cover and mountain big sagebrush (*A. t. ssp. vaseyana*) does not naturally exceed 20...

Author(s): Bruce L. Welch, Craig Criddle
Year Published: 2003
Type: Document
Technical Report or White Paper

Atriplex canescens (fourwing saltbush)

www.nrfirescience.org/resource/10727

This FEIS species review synthesizes information on the relationship of *Atriplex canescens* (fourwing saltbush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Janet L. Howard
Year Published: 2003
Type: Document
Synthesis

Pinus contorta var. latifolia (Rocky Mountain lodgepole pine)

www.nrfirescience.org/resource/10597

This FEIS species review synthesizes information on the relationship of *Pinus contorta* var. *latifolia* (Rocky Mountain lodgepole pine) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Michelle B. Anderson

Year Published: 2003

Type: Document

Synthesis

Sisymbrium altissimum (tumble mustard)

www.nrfirescience.org/resource/10458

This FEIS species review synthesizes information on the relationship of *Sisymbrium altissimum* (tumble mustard) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): Janet L. Howard

Year Published: 2003

Type: Document

Synthesis

Artemisia frigida (fringed sagebrush)

www.nrfirescience.org/resource/10788

This FEIS species review synthesizes information on the relationship of *Artemisia frigida* (fringed sagebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Jack McWilliams

Year Published: 2003

Type: Document

Synthesis

Vegetation dynamics under fire exclusion and logging in a Rocky Mountain watershed, 1856-1996

www.nrfirescience.org/resource/8264

How have changes in land management practices affected vegetation patterns in the greater Yellowstone ecosystem? This question led us to develop a deterministic, successional, vegetation model to 'turn back the clock' on a study area and assess how patterns in vegetation cover type and structure have changed through different...

Author(s): Alisa L. Gallant, Andrew J. Hansen, John S. Councilman, Duane K. Monte, David W. Betz

Year Published: 2003

Type: Document

Book or Chapter or Journal Article

Bouteloua gracilis (blue grama)

www.nrfirescience.org/resource/10604

This FEIS species review synthesizes information on the relationship of *Bouteloua gracilis* (blue grama) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Michelle B. Anderson

Year Published: 2003

Type: Document
Synthesis

Schoenocrambe linifolia (flaxleaf plainsmustard)

www.nrfirescience.org/resource/10712

This FEIS species review synthesizes information on the relationship of Schoenocrambe linifolia (flaxleaf plainsmustard) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution,...

Author(s): Janet L. Howard

Year Published: 2003

Type: Document

Synthesis

Tamarix chinensis, Tamarix gallica, Tamarix parviflora, Tamarix ramosissima (tamarisk, French tamarisk, small-flowered tamarisk, saltcedar)

www.nrfirescience.org/resource/10485

This FEIS species review synthesizes information on the relationship of Tamarix chinensis, Tamarix gallica, Tamarix parviflora, Tamarix ramosissima (tamarisk, French tamarisk, small-flowered tamarisk, saltcedar) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and...

Author(s): Kristin L. Zouhar

Year Published: 2003

Type: Document

Synthesis

Descurainia sophia (flixweed tansymustard)

www.nrfirescience.org/resource/10463

This FEIS species review synthesizes information on the relationship of Descurainia sophia (flixweed tansymustard) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species'...

Author(s): Janet L. Howard

Year Published: 2003

Type: Document

Synthesis

Prescribed fire effects on dalmation toadflax

www.nrfirescience.org/resource/8281

Prescribed fires are important for rangeland restoration and affect plant community composition and species interactions. Many rangeland plant communities have been, or are under the threat of noxious weed invasion, however there is little information on how fire effects weeds. Our objective was to determine the effects of...

Author(s): James S. Jacobs, Roger L. Sheley

Year Published: 2003

Type: Document

Book or Chapter or Journal Article

Descurainia pinnata (pinnate tansymustard)

www.nrfirescience.org/resource/10723

This FEIS species review synthesizes information on the relationship of *Descurainia pinnata* (pinnate tansymustard) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Janet L. Howard

Year Published: 2003

Type: Document

Synthesis

Picrothamnus desertorum (budsage)

www.nrfirescience.org/resource/10791

This FEIS species review synthesizes information on the relationship of *Picrothamnus desertorum* (budsage) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Jack McWilliams

Year Published: 2003

Type: Document

Synthesis

Potentilla recta (sulfur cinquefoil)

www.nrfirescience.org/resource/10497

This FEIS species review synthesizes information on the relationship of *Potentilla recta* (sulfur cinquefoil) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Kristin L. Zouhar

Year Published: 2003

Type: Document

Synthesis

Bromus tectorum (cheatgrass)

www.nrfirescience.org/resource/10495

This FEIS species review synthesizes information on the relationship of *Bromus tectorum* (cheatgrass) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Kristin L. Zouhar

Year Published: 2003

Type: Document

Synthesis

Pinus ponderosa var. scopulorum (interior ponderosa pine)

www.nrfirescience.org/resource/10718

This FEIS species review synthesizes information on the relationship of *Pinus ponderosa* var. *scopulorum* (interior ponderosa pine) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Janet L. Howard

Year Published: 2003

Type: Document

Synthesis

Artemisia filifolia (sand sagebrush)

www.nrfirescience.org/resource/10787

This FEIS species review synthesizes information on the relationship of *Artemisia filifolia* (sand sagebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Jack McWilliams

Year Published: 2003

Type: Document

Synthesis

Impacts of fire on hydrology and erosion in steep mountain big sagebrush communities

www.nrfirescience.org/resource/11407

Wildfire is an important ecological process and management issue on western rangelands. Major unknowns associated with wildfire are its affects on vegetation and soil conditions that influence hydrologic processes including infiltration, surface runoff, erosion, sediment transport, and flooding. Post wildfire hydrologic response was...

Author(s): Frederick B. Pierson, Peter R. Robichaud, Kenneth E. Spaeth, Corey A. Moffet

Year Published: 2003

Type: Document

Conference Proceedings

Mapping the cheatgrass-caused departure from historical natural fire regimes in the Great Basin, USA

www.nrfirescience.org/resource/11490

Cheatgrass (*Bromus tectorum*) is an exotic grass that has increased fire hazard on millions of square kilometers of semi-arid rangelands in the western United States. Cheatgrass aggressively out competes native vegetation after fire and significantly enhances fire size and frequency. To evaluate the effect of cheatgrass on historical...

Author(s): James P. Menakis, Dianne Osborne, Melanie Miller

Year Published: 2003

Type: Document

Conference Proceedings

Artemisia rigida (stiff sagebrush)

www.nrfirescience.org/resource/10785

This FEIS species review synthesizes information on the relationship of *Artemisia rigida* (stiff sagebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Jack McWilliams

Year Published: 2003

Type: Document

Synthesis

Climatic controls on fire-induced sediment pulses in Yellowstone National Park and central Idaho: a long-term perspective

www.nrfirescience.org/resource/7962

Fire management addressing postfire erosion and aquatic ecosystems tends to focus on short-term effects persisting up to about a decade after fire. A longer perspective is important in understanding natural variability in postfire erosion and sedimentation, the role of these processes in structuring habitat, and future expectations...

Author(s): Grant A. Meyer, Jennifer L. Pierce

Year Published: 2003

Type: Document

Book or Chapter or Journal Article, Synthesis

Linaria dalmatica, Linaria vulgaris (Dalmatian toadflax, yellow toadflax)

www.nrfirescience.org/resource/10489

This FEIS species review synthesizes information on the relationship of *Linaria dalmatica*, *Linaria vulgaris* (Dalmatian toadflax, yellow toadflax) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is...

Author(s): Kristin L. Zouhar

Year Published: 2003

Type: Document

Synthesis

Lythrum salicaria (purple loosestrife)

www.nrfirescience.org/resource/10467

This FEIS species review synthesizes information on the relationship of *Lythrum salicaria* (purple loosestrife) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): Gregory T. Munger

Year Published: 2002

Type: Document

Synthesis

Impacts of wildfire on soil hydrological properties of steep sagebrush-steppe rangeland

www.nrfirescience.org/resource/11441

In late August 1996, a wildfire swept across the sagebrush-dominated foothills above Boise, Idaho. Fire impacts on infiltration and inter-rill erosion were examined 1 year following the fire with simulated rainfall. Densely vegetated north-facing slopes were compared with sparsely vegetated south-facing slopes under both burned (...)

Author(s): Frederick B. Pierson, D. H. Carlson, Kenneth E. Spaeth

Year Published: 2002

Type: Document

Book or Chapter or Journal Article

Artemisia cana, Artemisia cana subsp. Bolanderi, Artemisia cana subsp. cana, Artemisia cana subsp. viscidula (silver sagebrush, Bolander silver sagebrush, plains silver sagebrush, mountain silver sagebrush)

www.nrfirescience.org/resource/10729

This FEIS species review synthesizes information on the relationship of *Artemisia cana*, *Artemisia cana* subsp. *Bolanderi*, *Artemisia cana* subsp. *cana*, *Artemisia cana* subsp. *viscidula* (silver sagebrush, Bolander silver sagebrush, plains silver sagebrush, mountain silver sagebrush) to fire--how fire affects the species and its habitat,...

Author(s): Janet L. Howard

Year Published: 2002

Type: Document

Synthesis

Conservation of greater sage-grouse on public lands in the Western U.S.: implications of recovery and management policies

www.nrfirescience.org/resource/11076

The role of the Policy Analysis Center for Western Public Lands is to provide integrated social, economic and ecological analyses of public land policies that affect communities in the West. Its mission is to help rural communities, policy makers, resource managers, resource users and others understand, analyze and engage...

Author(s): Carl L. Wambolt, Aaron J. Harp, Bruce L. Welch, Nancy L. Shaw, John W. Connelly, Kerry P. Reese, Clait E. Braun, Donald A. Klebenow, E. Durant McArthur, James G. Thompson, L. Allen Torell, John A. Tanaka

Year Published: 2002

Type: Document

Management or Planning Document

Pseudotsuga menziesii var. glauca (Rocky Mountain Douglas-fir)

www.nrfirescience.org/resource/10853

This FEIS species review synthesizes information on the relationship of *Pseudotsuga menziesii* var. *glauca* (Rocky Mountain Douglas-fir) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Peter D. Steinberg

Year Published: 2002

Type: Document

Synthesis

Centaurea solstitialis (yellow starthistle)

www.nrfirescience.org/resource/10484

This FEIS species review synthesizes information on the relationship of *Centaurea solstitialis* (yellow starthistle) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species'...

Author(s): Kristin L. Zouhar

Year Published: 2002

Type: Document

Synthesis

Elymus lanceolatus (thickspike wheatgrass)

www.nrfirescience.org/resource/10825

This FEIS species review synthesizes information on the relationship of *Elymus lanceolatus* (thickspike wheatgrass) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Janette S. Scher

Year Published: 2002

Type: Document

Synthesis

Cynoglossum officinale (houndstongue)

www.nrfirescience.org/resource/10500

This FEIS species review synthesizes information on the relationship of *Cynoglossum officinale* (houndstongue) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): Kristin L. Zouhar

Year Published: 2002

Type: Document

Synthesis

Carduus nutans (musk thistle)

www.nrfirescience.org/resource/10494

This FEIS species review synthesizes information on the relationship of *Carduus nutans* (musk thistle) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Kristin L. Zouhar

Year Published: 2002

Type: Document

Synthesis

Tetradymia nuttallii (Nuttall's horsebrush)

www.nrfirescience.org/resource/10734

This FEIS species review synthesizes information on the relationship of *Tetradymia nuttallii* (Nuttall's horsebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Janet L. Howard

Year Published: 2002

Type: Document

Synthesis

Cirsium vulgare (bull thistle)

www.nrfirescience.org/resource/10492

This FEIS species review synthesizes information on the relationship of *Cirsium vulgare* (bull thistle) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Kristin L. Zouhar

Year Published: 2002

Type: Document

Synthesis

Bird counts of burned versus unburned big sagebrush sites

www.nrfirescience.org/resource/11090

Burned-over big sagebrush sites dominated by perennial grasses supported fewer species of birds and fewer total number of birds than sites of unburned big sagebrush sites.

Author(s): Bruce L. Welch

Year Published: 2002

Type: Document
Research Brief or Fact Sheet

Artemisia arbuscula (low sagebrush)

www.nrfirescience.org/resource/10854

This FEIS species review synthesizes information on the relationship of Artemisia arbuscula (low sagebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Peter D. Steinberg

Year Published: 2002

Type: Document

Synthesis

Pinus edulis (Colorado pinyon)

www.nrfirescience.org/resource/10598

This FEIS species review synthesizes information on the relationship of Pinus edulis (Colorado pinyon) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Michelle B. Anderson

Year Published: 2002

Type: Document

Synthesis

Juniperus scopulorum (Rocky Mountain juniper)

www.nrfirescience.org/resource/10827

This FEIS species review synthesizes information on the relationship of Juniperus scopulorum (Rocky Mountain juniper) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Janette S. Scher

Year Published: 2002

Type: Document

Synthesis

Schizachyrium scoparium (little bluestem)

www.nrfirescience.org/resource/10852

This FEIS species review synthesizes information on the relationship of Schizachyrium scoparium (little bluestem) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Peter D. Steinberg

Year Published: 2002

Type: Document

Synthesis

Carex geyeri (elk sedge)

www.nrfirescience.org/resource/10615

This FEIS species review synthesizes information on the relationship of Carex geyeri (elk sedge) to

fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general...

Author(s): Amy C. Chadwick

Year Published: 2002

Type: Document

Synthesis

Balsamorhiza sagittata (arrowleaf balsamroot)

www.nrfirescience.org/resource/10789

This FEIS species review synthesizes information on the relationship of *Balsamorhiza sagittata* (arrowleaf balsamroot) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Jack McWilliams

Year Published: 2002

Type: Document

Synthesis

Tetradymia glabrata (littleleaf horsebrush)

www.nrfirescience.org/resource/10735

This FEIS species review synthesizes information on the relationship of *Tetradymia glabrata* (littleleaf horsebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Janet L. Howard

Year Published: 2002

Type: Document

Synthesis

Tetradymia spinosa (spiny horsebrush)

www.nrfirescience.org/resource/10733

This FEIS species review synthesizes information on the relationship of *Tetradymia spinosa* (spiny horsebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Janet L. Howard

Year Published: 2002

Type: Document

Synthesis

Leymus cinereus (basin wildrye)

www.nrfirescience.org/resource/10601

This FEIS species review synthesizes information on the relationship of *Leymus cinereus* (basin wildrye) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Michelle B. Anderson

Year Published: 2002

Type: Document

Synthesis

Pinus monophylla (singleleaf pinyon)

www.nrfirescience.org/resource/10935

This FEIS species review synthesizes information on the relationship of *Pinus monophylla* (singleleaf pinyon) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Kristin L. Zouhar

Year Published: 2001

Type: Document

Synthesis

Populus angustifolia (narrowleaf cottonwood)

www.nrfirescience.org/resource/10829

This FEIS species review synthesizes information on the relationship of *Populus angustifolia* (narrowleaf cottonwood) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Kevin A. Simonin

Year Published: 2001

Type: Document

Synthesis

Populus balsamifera subsp. trichocarpa (black cottonwood)

www.nrfirescience.org/resource/10851

This FEIS species review synthesizes information on the relationship of *Populus balsamifera* subsp. *trichocarpa* (black cottonwood) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Peter D. Steinberg

Year Published: 2001

Type: Document

Synthesis

Cirsium arvense (Canada thistle)

www.nrfirescience.org/resource/10482

This FEIS species review synthesizes information on the relationship of *Cirsium arvense* (Canada thistle) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Kristin L. Zouhar

Year Published: 2001

Type: Document

Synthesis

Pinus flexilis (limber pine)

www.nrfirescience.org/resource/10741

This FEIS species review synthesizes information on the relationship of *Pinus flexilis* (limber pine) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic

biology, and...

Author(s): Kathleen A. Johnson

Year Published: 2001

Type: Document

Synthesis

Acroptilon repens (Russian knapweed)

www.nrfirescience.org/resource/10496

This FEIS species review synthesizes information on the relationship of *Acroptilon repens* (Russian knapweed) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Kristin L. Zouhar

Year Published: 2001

Type: Document

Synthesis

Dasiphora floribunda (shrubby cinquefoil)

www.nrfirescience.org/resource/10608

This FEIS species review synthesizes information on the relationship of *Dasiphora floribunda* (shrubby cinquefoil) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Michelle B. Anderson

Year Published: 2001

Type: Document

Synthesis

The role of fire in juniper and pinyon woodlands: a descriptive analysis

www.nrfirescience.org/resource/10994

Among the most pronounced vegetation changes in past 130 years has been the increase in both distribution and density of juniper (*Juniperus* spp.) and pinyon (*Pinus* spp.) across the Intermountain West. Juniper and pinyon species between the Canadian and Mexican borders occupy over 30 million ha throughout this region. Prior to...

Author(s): Richard F. Miller, Robin J. Tausch

Year Published: 2001

Type: Document

Conference Proceedings

Elymus elymoides (bottlebrush squirreltail)

www.nrfirescience.org/resource/10834

This FEIS species review synthesizes information on the relationship of *Elymus elymoides* (bottlebrush squirreltail) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Kevin A. Simonin

Year Published: 2001

Type: Document

Synthesis

Atriplex confertifolia (shadscale)

www.nrfirescience.org/resource/10832

This FEIS species review synthesizes information on the relationship of *Atriplex confertifolia* (shadscale) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Kevin A. Simonin

Year Published: 2001

Type: Document

Synthesis

Water quality, substratum and biotic responses of five central Idaho (USA) streams during the first year following the Mortar Creek fire

www.nrfirescience.org/resource/11442

The Mortar Creek Fire burned 26 000 ha of mixed-conifer Rocky Mountain forest in July-August 1979. Changes in burn stream conditions were examined relative to reference streams for various ecological factors on two to six occasions, from October 1979 to August 1980. Factors included major ions and nutrients, suspended and benthic...

Author(s): G. Wayne Minshall, James T. Brock, Douglas A. Andrews, Christopher T. Robinson

Year Published: 2001

Type: Document

Book or Chapter or Journal Article

Taeniatherum caput-medusae (medusahead)

www.nrfirescience.org/resource/10447

This FEIS species review synthesizes information on the relationship of *Taeniatherum caput-medusae* (medusahead) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species'...

Author(s): Amy Archer

Year Published: 2001

Type: Document

Synthesis

Tetradymia canescens (gray horsebrush)

www.nrfirescience.org/resource/10824

This FEIS species review synthesizes information on the relationship of *Tetradymia canescens* (gray horsebrush) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Janette S. Scher

Year Published: 2001

Type: Document

Synthesis

Centaurea diffusa (diffuse knapweed)

www.nrfirescience.org/resource/10481

This FEIS species review synthesizes information on the relationship of *Centaurea diffusa* (diffuse knapweed) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy,...

Author(s): Kristin L. Zouhar
Year Published: 2001
Type: Document
Synthesis

Sporobolus airoides (alkali sacaton)

www.nrfirescience.org/resource/10744

This FEIS species review synthesizes information on the relationship of *Sporobolus airoides* (alkali sacaton) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Kathleen A. Johnson
Year Published: 2001
Type: Document
Synthesis

Nassella viridula (green needlegrass)

www.nrfirescience.org/resource/10869

This FEIS species review synthesizes information on the relationship of *Nassella viridula* (green needlegrass) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology...

Author(s): Jennifer L. Taylor
Year Published: 2001
Type: Document
Synthesis

Ceanothus velutinus (snowbrush ceanothus)

www.nrfirescience.org/resource/10593

This FEIS species review synthesizes information on the relationship of *Ceanothus velutinus* (snowbrush ceanothus) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic...

Author(s): Michelle B. Anderson
Year Published: 2001
Type: Document
Synthesis

Acer glabrum (Rocky Mountain maple)

www.nrfirescience.org/resource/10609

This FEIS species review synthesizes information on the relationship of *Acer glabrum* (Rocky Mountain maple) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology,...

Author(s): Michelle B. Anderson
Year Published: 2001
Type: Document
Synthesis

Centaurea maculosa (spotted knapweed)

www.nrfirescience.org/resource/10493

This FEIS species review synthesizes information on the relationship of *Centaurea maculosa* (spotted knapweed) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): Kristin L. Zouhar

Year Published: 2001

Type: Document

Synthesis

Populus deltoides, Populus deltoides var. deltoides, Populus deltoides var. mislizeni, Populus deltoides var. monilifera (eastern cottonwood, eastern cottonwood, Rio Grande cottonwood, plains cottonwood)

www.nrfirescience.org/resource/10862

This FEIS species review synthesizes information on the relationship of *Populus deltoides*, *Populus deltoides* var. *deltoides*, *Populus deltoides* var. *mislizeni*, *Populus deltoides* var. *monilifera* (eastern cottonwood, eastern cottonwood, Rio Grande cottonwood, plains cottonwood) to fire--how fire affects the species and its habitat,...

Author(s): Jane E. Taylor

Year Published: 2001

Type: Document

Synthesis

Ephedra viridis (green ephedra)

www.nrfirescience.org/resource/10603

This FEIS species review synthesizes information on the relationship of *Ephedra viridis* (green ephedra) to fire--how fire affects the species and its habitat, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and...

Author(s): Michelle B. Anderson

Year Published: 2001

Type: Document

Synthesis

Bromus madritensis, Bromus rubens (foxtail chess, red brome)

www.nrfirescience.org/resource/10469

This FEIS species review synthesizes information on the relationship of *Bromus madritensis*, *Bromus rubens* (foxtail chess, red brome) to fire--how fire affects the species and its habitat, invasiveness of the species, effects of the species on fuels and fire regimes, and fire management considerations. Information is also provided on...

Information is also provided on...

Author(s): Kevin A. Simonin

Year Published: 2001

Type: Document

Synthesis

Achnatherum thurberiana (Thurber needlegrass)

www.nrfirescience.org/resource/10610

This FEIS species review synthesizes information on the relationship of *Achnatherum thurberiana* (Thurber needlegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Amy Archer
Year Published: 2000
Type: Document
Synthesis

Long-term effects of fire on sage grouse habitat

www.nrfirescience.org/resource/11456

This study documented the long-term (>10 years) impact of fire on sage grouse (*Centrocercus urophasianus* Bonaparte) nesting and brood-rearing habitats on the Upper Snake River Plain in southeastern Idaho.

Author(s): Pamela J. Nelle, Kerry P. Reese, John W. Connelly
Year Published: 2000
Type: Document
Book or Chapter or Journal Article

Achnatherum lettermanii (Letterman's needlegrass)

www.nrfirescience.org/resource/10866

This FEIS species review synthesizes information on the relationship of *Achnatherum lettermanii* (Letterman's needlegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Jane E. Taylor
Year Published: 2000
Type: Document
Synthesis

Sporobolus cryptandrus (sand dropseed)

www.nrfirescience.org/resource/10836

This FEIS species review synthesizes information on the relationship of *Sporobolus cryptandrus* (sand dropseed) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Kevin A. Simonin
Year Published: 2000
Type: Document
Synthesis

Fallugia paradoxa (Apache plume)

www.nrfirescience.org/resource/10786

This FEIS species review synthesizes information on the relationship of *Fallugia paradoxa* (Apache plume) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Jack McWilliams
Year Published: 2000
Type: Document
Synthesis

Fire in western shrubland, woodland, and grassland ecosystems

www.nrfirescience.org/resource/11116

This state-of-knowledge review about the effects of fire on flora and fuels can assist land managers with ecosystem and fire management planning and in their efforts to inform others about the ecological role of fire. Chapter topics include fire regime classification, autecological effects of fire, fire regime characteristics and...

Author(s): Timothy E. Paysen, R. James Ansley, James K. Brown, Gerald J. Gottfried, Sally M. Haase, Michael G. Harrington, Marcia G. Narog, Stephen S. Sackett, Ruth C. Wilson

Year Published: 2000

Type: Document

Synthesis, Technical Report or White Paper

Calamagrostis rubescens (pinegrass)

www.nrfirescience.org/resource/10755

This FEIS species review synthesizes information on the relationship of *Calamagrostis rubescens* (pinegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Robin F. Matthews

Year Published: 2000

Type: Document

Synthesis

Festuca altaica, Festuca campestris, Festuca hallii (northern rough fescue, alpine rough fescue, plains rough fescue)

www.nrfirescience.org/resource/10881

This FEIS species review synthesizes information on the relationship of *Festuca altaica*, *Festuca campestris*, *Festuca hallii* (northern rough fescue, alpine rough fescue, plains rough fescue) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy...

Author(s): D. A. Tirmenstein

Year Published: 2000

Type: Document

Synthesis

Festuca idahoensis (Idaho fescue)

www.nrfirescience.org/resource/10937

This FEIS species review synthesizes information on the relationship of *Festuca idahoensis* (Idaho fescue) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Kristin L. Zouhar

Year Published: 2000

Type: Document

Synthesis

Koeleria macrantha (prairie Junegrass)

www.nrfirescience.org/resource/10830

This FEIS species review synthesizes information on the relationship of *Koeleria macrantha* (prairie Junegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Kevin A. Simonin

Year Published: 2000

Type: Document

Synthesis

Prunus virginiana (chokecherry)

www.nrfirescience.org/resource/10503

This FEIS species review synthesizes information on the relationship of *Prunus virginiana* (chokecherry) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Kathleen A. Johnson

Year Published: 2000

Type: Document

Synthesis

Guidelines to manage sage grouse populations and their habitats

www.nrfirescience.org/resource/15385

The status of sage grouse populations and habitats has been a concern to sportsmen and biologists for >80 years. Despite management and research efforts that date to the 1930s, breeding populations of this species have declined throughout much of its range. In May 1999, the western sage grouse (*C. urophasianus phaios*) in...

Author(s): John W. Connelly, Michael A. Schroeder, Alan R. Sands, Clait E. Braun

Year Published: 2000

Type: Document

Management or Planning Document

Quercus gambelii (Gambel oak)

www.nrfirescience.org/resource/10835

This FEIS species review synthesizes information on the relationship of *Quercus gambelii* (Gambel oak) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Kevin A. Simonin

Year Published: 2000

Type: Document

Synthesis

Pleuraphis jamesii (galleta)

www.nrfirescience.org/resource/10833

This FEIS species review synthesizes information on the relationship of *Pleuraphis jamesii* (galleta) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Kevin A. Simonin

Year Published: 2000

Type: Document

Synthesis

Symphoricarpos albus (common snowberry)

www.nrfirescience.org/resource/10783

This FEIS species review synthesizes information on the relationship of *Symphoricarpos albus* (common snowberry) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Jack McWilliams

Year Published: 2000

Type: Document

Synthesis

Achnatherum nelsonii (Columbia needlegrass)

www.nrfirescience.org/resource/10938

This FEIS species review synthesizes information on the relationship of *Achnatherum nelsonii* (Columbia needlegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Kristin L. Zouhar

Year Published: 2000

Type: Document

Synthesis

Elymus canadensis (Canada wildrye)

www.nrfirescience.org/resource/10831

This FEIS species review synthesizes information on the relationship of *Elymus canadensis* (Canada wildrye) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Kevin A. Simonin

Year Published: 2000

Type: Document

Synthesis

Danthonia unispicata (onespike oatgrass)

www.nrfirescience.org/resource/10754

This FEIS species review synthesizes information on the relationship of *Danthonia unispicata* (onespike oatgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Robin F. Matthews

Year Published: 2000

Type: Document

Synthesis

Gutierrezia sarothrae (broom snakeweed)

www.nrfirescience.org/resource/10880

This FEIS species review synthesizes information on the relationship of *Gutierrezia sarothrae* (broom snakeweed) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): D. A. Tirmenstein

Year Published: 1999

Type: Document

Synthesis

Juniperus occidentalis (western juniper)

www.nrfirescience.org/resource/10878

This FEIS species review synthesizes information on the relationship of *Juniperus occidentalis* (western juniper) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): D. A. Tirmenstein

Year Published: 1999

Type: Document

Synthesis

Achnatherum hymenoides (Indian ricegrass)

www.nrfirescience.org/resource/10870

This FEIS species review synthesizes information on the relationship of *Achnatherum hymenoides* (Indian ricegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): D. A. Tirmenstein

Year Published: 1999

Type: Document

Synthesis

Birds in a sagebrush sea: Managing sagebrush habitat for bird communities

www.nrfirescience.org/resource/15329

This booklet presents land management recommendations to help bird communities in sagebrush habitats. It was prepared for the Western Working Group of Partners in Flight, a partnership of private citizens, industry groups, government agencies, universities, nongovernment organizations, and others interested in bird conservation. Why...

Author(s): Christine Paige, Sharon Ritter

Year Published: 1999

Type: Document

Management or Planning Document

Symphoricarpos oreophilus (mountain snowberry)

www.nrfirescience.org/resource/10590

This FEIS species review synthesizes information on the relationship of *Symphoricarpos oreophilus* (mountain snowberry) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Keith Aleksoff

Year Published: 1999

Type: Document

Synthesis

Artemisia tridentata subsp. tridentata (basin big sagebrush)

www.nrfirescience.org/resource/10886

This FEIS species review synthesizes information on the relationship of *Artemisia tridentata* subsp. *tridentata* (basin big sagebrush) to fire--how fire affects the species and its habitat, and fire

management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management....

Author(s): D. A. Tirmenstein

Year Published: 1999

Type: Document

Synthesis

Amelanchier utahensis (Utah serviceberry)

www.nrfirescience.org/resource/10588

This FEIS species review synthesizes information on the relationship of Amelanchier utahensis (Utah serviceberry) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Elena Zlatnik

Year Published: 1999

Type: Document

Synthesis

Chrysothamnus nauseosus (rubber rabbitbrush)

www.nrfirescience.org/resource/10883

This FEIS species review synthesizes information on the relationship of Chrysothamnus nauseosus (rubber rabbitbrush) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): D. A. Tirmenstein

Year Published: 1999

Type: Document

Synthesis

Effects of succession on species richness of the western juniper woodland/sagebrush steppe mosaic

www.nrfirescience.org/resource/12106

The development of mature juniper woodlands has often been associated with decreases in the herbaceous and shrub components of the community. This study focused on changes in species richness and diversity along a successional gradient at both the community and watershed scale in the Owyhee Mountains in southwestern Idaho. Community...

Author(s): Stephen C. Bunting

Year Published: 1999

Type: Document

Conference Proceedings

Juniperus osteosperma (Utah juniper)

www.nrfirescience.org/resource/10586

This FEIS species review synthesizes information on the relationship of Juniperus osteosperma (Utah juniper) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Elena Zlatnik

Year Published: 1999

Type: Document

Synthesis

Purshia tridentata (antelope bitterbrush)

www.nrfirescience.org/resource/10584

This FEIS species review synthesizes information on the relationship of *Purshia tridentata* (antelope bitterbrush) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Elena Zlatnik

Year Published: 1999

Type: Document

Synthesis

Grayia spinosa (spiny hopsage)

www.nrfirescience.org/resource/10879

This FEIS species review synthesizes information on the relationship of *Grayia spinosa* (spiny hopsage) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): D. A. Tirmenstein

Year Published: 1999

Type: Document

Synthesis

Pascopyrum smithii (western wheatgrass)

www.nrfirescience.org/resource/10877

This FEIS species review synthesizes information on the relationship of *Pascopyrum smithii* (western wheatgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): D. A. Tirmenstein

Year Published: 1999

Type: Document

Synthesis

Bromus tectorum expansion and biodiversity loss on the Snake River Plain, southern Idaho, U.S.A.

www.nrfirescience.org/resource/11420

The Snake River Plain forms a 6 million ha arc-shaped depression across southern Idaho. Basalt flows, fresh water sediments, loess and volcanic deposits cover its surface. Elevation increases eastward from 650 to 2,150 m altitude. Climate is semi-arid with annual precipitation ranging from 150 to 400 mm, arriving primarily in winter...

Author(s): Nancy L. Shaw, Victoria A. Saab, Stephen B. Monsen, T. D. Rich

Year Published: 1999

Type: Document

Conference Proceedings

Artemisia tridentata subsp. wyomingensis (Wyoming big sagebrush)

www.nrfirescience.org/resource/10738

This FEIS species review synthesizes information on the relationship of *Artemisia tridentata* subsp. *wyomingensis* (Wyoming big sagebrush) to fire--how fire affects the species and its habitat, and fire

management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management...

Author(s): Janet L. Howard

Year Published: 1999

Type: Document

Synthesis

Achillea millefolium (western yarrow)

www.nrfirescience.org/resource/10591

This FEIS species review synthesizes information on the relationship of *Achillea millefolium* (western yarrow) to fire--how fire affects the species and its habitat, and fire management considerations.

Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Keith Aleksoff

Year Published: 1999

Type: Document

Synthesis

Artemisia tripartita subsp. rupicola, Artemisia tripartita subsp. tripartita (Wyoming threetip sagebrush, tall threetip sagebrush)

www.nrfirescience.org/resource/10887

This FEIS species review synthesizes information on the relationship of *Artemisia tripartita* subsp. *rupicola*, *Artemisia tripartita* subsp. *tripartita* (Wyoming threetip sagebrush, tall threetip sagebrush) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the...

Author(s): D. A. Tirmenstein

Year Published: 1999

Type: Document

Synthesis

Muhlenbergia richardsonis (mat muhly)

www.nrfirescience.org/resource/10589

This FEIS species review synthesizes information on the relationship of *Muhlenbergia richardsonis* (mat muhly) to fire--how fire affects the species and its habitat, and fire management considerations.

Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Keith Aleksoff

Year Published: 1999

Type: Document

Synthesis

Chrysothamnus viscidiflorus (green rabbitbrush)

www.nrfirescience.org/resource/10884

This FEIS species review synthesizes information on the relationship of *Chrysothamnus viscidiflorus* (green rabbitbrush) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): D. A. Tirmenstein

Year Published: 1999

Type: Document

Synthesis

Hesperostipa comata (needle-and-thread grass)

www.nrfirescience.org/resource/10587

This FEIS species review synthesizes information on the relationship of *Hesperostipa comata* (needle-and-thread grass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Elena Zlatnik

Year Published: 1999

Type: Document

Synthesis

Danthonia intermedia (timber oatgrass)

www.nrfirescience.org/resource/10882

This FEIS species review synthesizes information on the relationship of *Danthonia intermedia* (timber oatgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): D. A. Tirmenstein

Year Published: 1999

Type: Document

Synthesis

Pseudoroegneria spicata (bluebunch wheatgrass)

www.nrfirescience.org/resource/10585

This FEIS species review synthesizes information on the relationship of *Pseudoroegneria spicata* (bluebunch wheatgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Elena Zlatnik

Year Published: 1999

Type: Document

Synthesis

Poa arida (plains bluegrass)

www.nrfirescience.org/resource/10715

This FEIS species review synthesizes information on the relationship of *Poa arida* (plains bluegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Janet L. Howard

Year Published: 1998

Type: Document

Synthesis

Mapping historic fire regimes for the western United States: integrating remote sensing and biophysical data

www.nrfirescience.org/resource/7937

We have developed a spatial database of historic natural fire regimes for the eleven western States to provide information in support of expected national increases in prescribed burning. Fire regimes are

described in terms both of frequency and severity, and we have classified five distinct fire regimes:
Author(s): Colin C. Hardy, James P. Menakis, Donald G. Long, James K. Brown, David L. Bunnell
Year Published: 1998
Type: Document
Conference Proceedings

Bromus hordeaceus (soft chess)

www.nrfirescience.org/resource/10461

This FEIS species review synthesizes information on the relationship of *Bromus hordeaceus* (soft chess) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management....

Author(s): Janet L. Howard

Year Published: 1998

Type: Document

Synthesis

Wildfire case study: Butte City Fire, southeastern Idaho, July 1, 1994

www.nrfirescience.org/resource/11146

The Butte City Fire occurred on July 1, 1994, west of Idaho Falls, ID. Ignited from a burning flat tire, the blaze was driven by high winds that caused it to cover over 20,500 acres in just over 6.5 hours. Sagebrush (*Artemisia tridentata* ssp. *wyomingensis*) is the principal shrub species of this high desert rangeland. With the...

Author(s): Bret W. Butler, Timothy D. Reynolds

Year Published: 1997

Type: Document

Technical Report or White Paper

Ambystoma macrodactylum (long-toed salamander)

www.nrfirescience.org/resource/10732

This FEIS species review synthesizes information on the relationship of *Ambystoma macrodactylum* (long-toed salamander) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Janet L. Howard

Year Published: 1997

Type: Document

Synthesis

Amelanchier alnifolia (Saskatoon serviceberry)

www.nrfirescience.org/resource/10730

This FEIS species review synthesizes information on the relationship of *Amelanchier alnifolia* (Saskatoon serviceberry) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Janet L. Howard

Year Published: 1997

Type: Document

Synthesis

Aristida purpurea (purple threeawn)

www.nrfirescience.org/resource/10728

This FEIS species review synthesizes information on the relationship of *Aristida purpurea* (purple threeawn) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet L. Howard

Year Published: 1997

Type: Document

Synthesis

Poa fendleriana (Fendler bluegrass)

www.nrfirescience.org/resource/10708

This FEIS species review synthesizes information on the relationship of *Poa fendleriana* (Fendler bluegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet L. Howard

Year Published: 1997

Type: Document

Synthesis

Poa cusickii (Cusick's bluegrass)

www.nrfirescience.org/resource/10706

This FEIS species review synthesizes information on the relationship of *Poa cusickii* (Cusick's bluegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet L. Howard

Year Published: 1997

Type: Document

Synthesis

Poa secunda (Sandberg bluegrass)

www.nrfirescience.org/resource/10716

This FEIS species review synthesizes information on the relationship of *Poa secunda* (Sandberg bluegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet L. Howard

Year Published: 1997

Type: Document

Synthesis

Urocyon cinereoargenteus (common gray fox)

www.nrfirescience.org/resource/10506

This FEIS species review synthesizes information on the relationship of *Urocyon cinereoargenteus* (common gray fox) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Janet Sullivan

Year Published: 1996

Type: Document

Synthesis

Perognathus parvus (Great Basin pocket mouse)

www.nrfirescience.org/resource/10719

This FEIS species review synthesizes information on the relationship of *Perognathus parvus* (Great Basin pocket mouse) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Janet L. Howard

Year Published: 1996

Type: Document

Synthesis

Populus tremuloides (quaking aspen)

www.nrfirescience.org/resource/10717

This FEIS species review synthesizes information on the relationship of *Populus tremuloides* (quaking aspen) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet L. Howard

Year Published: 1996

Type: Document

Synthesis

Remote sensing of forest fire severity and vegetation recovery

www.nrfirescience.org/resource/8152

Burned forested areas have patterns of varying burn severity as a consequence of various topographic, vegetation, and meteorological factors. These patterns are detected and mapped using satellite data. Other ecological information can be abstracted from satellite data regarding rates of recovery of vegetation foliage and variation...

Author(s): Joseph D. White, Kevin C. Ryan, Carl H. Key, Steven W. Running

Year Published: 1996

Type: Document

Book or Chapter or Journal Article

Taxidea taxus (American badger)

www.nrfirescience.org/resource/10507

This FEIS species review synthesizes information on the relationship of *Taxidea taxus* (American badger) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Janet Sullivan

Year Published: 1996

Type: Document

Synthesis

Athene cunicularia (burrowing owl)

www.nrfirescience.org/resource/10726

This FEIS species review synthesizes information on the relationship of *Athene cunicularia* (burrowing owl) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet L. Howard

Year Published: 1996

Type: Document

Synthesis

An investigation on fire effects within xeric sage grouse brood habitat

www.nrfirescience.org/resource/11457

We investigated the short-term influence of fire on xeric sage grouse (*Centrocercus urophasianus* Bonaparte) brood habitat in southeastern Idaho from 1990-92.

Author(s): Richard A. Fischer, Kerry P. Reese, John W. Connelly

Year Published: 1996

Type: Document

Book or Chapter or Journal Article

Comparative effects of elk herbivory and 1988 fires on northern Yellowstone National Park grasslands

www.nrfirescience.org/resource/8265

The drought, frequent lightning strikes, and resultant large fires of 1988 in Yellowstone National Park were considered a several-century event for the area. They presented an unparalleled opportunity to document the effects of large fires on forage production, forage quality, and herbivory for the largest elk (*Cervus elaphus*)...

Author(s): Francis J. Singer, M. K. Harter

Year Published: 1996

Type: Document

Book or Chapter or Journal Article

Mustela vison (American mink)

www.nrfirescience.org/resource/10513

This FEIS species review synthesizes information on the relationship of *Mustela vison* (American mink) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Janet Sullivan

Year Published: 1996

Type: Document

Synthesis

Scophiopus intermontanus (Great Basin spadefoot)

www.nrfirescience.org/resource/10713

This FEIS species review synthesizes information on the relationship of *Scophiopus intermontanus* (Great Basin spadefoot) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Janet L. Howard

Year Published: 1996

Type: Document

Synthesis

Spermophilus townsendii (Townsend's ground squirrel)

www.nrfirescience.org/resource/10711

This FEIS species review synthesizes information on the relationship of *Spermophilus townsendii* (Townsend's ground squirrel) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This...

Author(s): Janet L. Howard

Year Published: 1996

Type: Document

Synthesis

Ribes montigenum (gooseberry currant)

www.nrfirescience.org/resource/10751

This FEIS species review synthesizes information on the relationship of *Ribes montigenum* (gooseberry currant) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Anna Marshall

Year Published: 1995

Type: Document

Synthesis

Dipodomys ordii (Ord's kangaroo rat)

www.nrfirescience.org/resource/10504

This FEIS species review synthesizes information on the relationship of *Dipodomys ordii* (Ord's kangaroo rat) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet Sullivan

Year Published: 1995

Type: Document

Synthesis

Festuca rubra (red fescue)

www.nrfirescience.org/resource/10923

This FEIS species review synthesizes information on the relationship of *Festuca rubra* (red fescue) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used for...

Author(s): Roberta A. Walsh

Year Published: 1995

Type: Document

Synthesis

Lynx rufus (bobcat)

www.nrfirescience.org/resource/10526

This FEIS species review synthesizes information on the relationship of *Lynx rufus* (bobcat) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species

review can be used for fire...

Author(s): Julie L. Tesky

Year Published: 1995

Type: Document

Synthesis

Ribes aureum (golden currant)

www.nrfirescience.org/resource/10749

This FEIS species review synthesizes information on the relationship of *Ribes aureum* (golden currant) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Anna Marshall

Year Published: 1995

Type: Document

Synthesis

Bos bison (American bison)

www.nrfirescience.org/resource/10549

This FEIS species review synthesizes information on the relationship of *Bos bison* (American bison) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used for...

Author(s): Julie L. Tesky

Year Published: 1995

Type: Document

Synthesis

Molothrus ater (brown-headed cowbird)

www.nrfirescience.org/resource/10444

This FEIS species review synthesizes information on the relationship of *Molothrus ater* (brown-headed cowbird) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general...

Author(s): Janet Sullivan

Year Published: 1995

Type: Document

Synthesis

Krascheninnikovia lanata (winterfat)

www.nrfirescience.org/resource/10614

This FEIS species review synthesizes information on the relationship of *Krascheninnikovia lanata* (winterfat) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Jennifer H. Carey

Year Published: 1995

Type: Document

Synthesis

Vegetal recovery following wildfire in seeded and unseeded sagebrush steppe

www.nrfirescience.org/resource/11459

Following an August wildfire, sagebrush (*Artemisia L.*)/grass benchlands adjacent to Pocatello, Ida., were seeded with a mixture of exotic wheatgrasses and forbs by rangeland drill in November 1987. The effects of seeding on vegetation development in the immediate postfire years were evaluated by comparing plant density, vegetal...

Author(s): Teresa D. Ratzlaff, Jay E. Anderson

Year Published: 1995

Type: Document

Book or Chapter or Journal Article

Winter habitat use by large ungulates following fire in northern Yellowstone National Park

www.nrfirescience.org/resource/8266

The effect of fire and habitat heterogeneity on winter foraging by ungulates was studied in northern Yellowstone National Park (YNP). Grazing was monitored at 15 study sites for 14 wk during the winters of 1991 and 1992. The location and intensity of grazing activity within each site were recorded on topographic maps and digitized...

Author(s): Scott M. Pearson, Monica G. Turner, Linda L. Wallace, William H. Romme

Year Published: 1995

Type: Document

Book or Chapter or Journal Article

Dichanthelium acuminatum (woolly panicum)

www.nrfirescience.org/resource/10914

This FEIS species review synthesizes information on the relationship of *Dichanthelium acuminatum* (woolly panicum) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Roberta A. Walsh

Year Published: 1995

Type: Document

Synthesis

Bubo virginianus (great horned owl)

www.nrfirescience.org/resource/10518

This FEIS species review synthesizes information on the relationship of *Bubo virginianus* (great horned owl) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet Sullivan

Year Published: 1995

Type: Document

Synthesis

Phasianus colchicus (ring-necked pheasant)

www.nrfirescience.org/resource/10535

This FEIS species review synthesizes information on the relationship of *Phasianus colchicus* (ring-necked pheasant) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Julie L. Tesky

Year Published: 1995

Type: Document

Synthesis

Peromyscus maniculatus (deer mouse)

www.nrfirescience.org/resource/10512

This FEIS species review synthesizes information on the relationship of *Peromyscus maniculatus* (deer mouse) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet Sullivan

Year Published: 1995

Type: Document

Synthesis

Procyon lotor (northern raccoon)

www.nrfirescience.org/resource/10533

This FEIS species review synthesizes information on the relationship of *Procyon lotor* (northern raccoon) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Julie L. Tesky

Year Published: 1995

Type: Document

Synthesis

Ribes cereum (wax currant)

www.nrfirescience.org/resource/10753

This FEIS species review synthesizes information on the relationship of *Ribes cereum* (wax currant) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used for...

Author(s): Anna Marshall

Year Published: 1995

Type: Document

Synthesis

Sialia mexicana (western bluebird)

www.nrfirescience.org/resource/10505

This FEIS species review synthesizes information on the relationship of *Sialia mexicana* (western bluebird) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet Sullivan

Year Published: 1995

Type: Document

Synthesis

Ribes velutinum (desert gooseberry)

www.nrfirescience.org/resource/10750

This FEIS species review synthesizes information on the relationship of *Ribes velutinum* (desert gooseberry) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Anna Marshall

Year Published: 1995

Type: Document

Synthesis

Canis latrans (coyote)

www.nrfirescience.org/resource/10548

This FEIS species review synthesizes information on the relationship of *Canis latrans* (coyote) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used for fire...

Author(s): Julie L. Tesky

Year Published: 1995

Type: Document

Synthesis

Muhlenbergia montana (mountain muhly)

www.nrfirescience.org/resource/10919

This FEIS species review synthesizes information on the relationship of *Muhlenbergia montana* (mountain muhly) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Roberta A. Walsh

Year Published: 1995

Type: Document

Synthesis

Lepus californicus (black-tailed jackrabbit)

www.nrfirescience.org/resource/10721

This FEIS species review synthesizes information on the relationship of *Lepus californicus* (black-tailed jackrabbit) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Janet L. Howard

Year Published: 1995

Type: Document

Synthesis

Philadelphus lewisii (Lewis' mockorange)

www.nrfirescience.org/resource/10613

This FEIS species review synthesizes information on the relationship of *Philadelphus lewisii* (Lewis' mockorange) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Jennifer H. Carey

Year Published: 1995

Type: Document

Synthesis

Schedonorus arundinaceus (tall fescue)

www.nrfirescience.org/resource/10479

This FEIS species review synthesizes information on the relationship of *Schedonorus arundinaceus* (tall fescue) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general...

Author(s): Roberta A. Walsh

Year Published: 1995

Type: Document

Synthesis

Deschampsia cespitosa (tufted hairgrass)

www.nrfirescience.org/resource/10913

This FEIS species review synthesizes information on the relationship of *Deschampsia cespitosa* (tufted hairgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Roberta A. Walsh

Year Published: 1995

Type: Document

Synthesis

Buteo lagopus (rough-legged hawk)

www.nrfirescience.org/resource/10517

This FEIS species review synthesizes information on the relationship of *Buteo lagopus* (rough-legged hawk) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet Sullivan

Year Published: 1995

Type: Document

Synthesis

Shepherdia argentea (silver buffaloberry)

www.nrfirescience.org/resource/10634

This FEIS species review synthesizes information on the relationship of *Shepherdia argentea* (silver buffaloberry) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Lora L. Esser

Year Published: 1995

Type: Document

Synthesis

Puma concolor (mountain lion)

www.nrfirescience.org/resource/10534

This FEIS species review synthesizes information on the relationship of *Puma concolor* (mountain lion) to fire--how fire affects the species and its habitat, and fire management considerations. Information is

also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Julie L. Tesky

Year Published: 1995

Type: Document

Synthesis

Sialia currucoides (mountain bluebird)

www.nrfirescience.org/resource/10510

This FEIS species review synthesizes information on the relationship of *Sialia currucoides* (mountain bluebird) to fire--how fire affects the species and its habitat, and fire management considerations.

Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Janet Sullivan

Year Published: 1995

Type: Document

Synthesis

Antilocapra americana (pronghorn)

www.nrfirescience.org/resource/10731

This FEIS species review synthesizes information on the relationship of *Antilocapra americana*

(pronghorn) to fire--how fire affects the species and its habitat, and fire management considerations.

Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Janet L. Howard

Year Published: 1995

Type: Document

Synthesis

Heracleum lanatum (cow parsnip)

www.nrfirescience.org/resource/10630

This FEIS species review synthesizes information on the relationship of *Heracleum lanatum* (cow parsnip) to fire--how fire affects the species and its habitat, and fire management considerations.

Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Lora L. Esser

Year Published: 1995

Type: Document

Synthesis

Aquila chrysaetos (golden eagle)

www.nrfirescience.org/resource/10554

This FEIS species review synthesizes information on the relationship of *Aquila chrysaetos* (golden eagle) to fire--how fire affects the species and its habitat, and fire management considerations.

Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Julie L. Tesky

Year Published: 1994

Type: Document

Synthesis

Buteo jamaicensis (red-tailed hawk)

www.nrfirescience.org/resource/10551

This FEIS species review synthesizes information on the relationship of *Buteo jamaicensis* (red-tailed hawk) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Julie L. Tesky

Year Published: 1994

Type: Document

Synthesis

Asio flammeus (short-eared owl)

www.nrfirescience.org/resource/10725

This FEIS species review synthesizes information on the relationship of *Asio flammeus* (short-eared owl) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Janet L. Howard

Year Published: 1994

Type: Document

Synthesis

Germination and establishment ecology of big sagebrush: Implications for community restoration

www.nrfirescience.org/resource/15421

Big sagebrush (*Artemisia tridentata*) seedling recruitment is limited by seed production and dispersal in space and time, by genetic constraints of specific ecotypes, and by environmental factors that include weather, microsite attributes, soil microbiota, herbivory, and inter- and intraspecific competition. Establishing this species...

Author(s): Susan E. Meyer

Year Published: 1994

Type: Document

Conference Proceedings

Deschampsia elongata (slender hairgrass)

www.nrfirescience.org/resource/10645

This FEIS species review synthesizes information on the relationship of *Deschampsia elongata* (slender hairgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Lora L. Esser

Year Published: 1994

Type: Document

Synthesis

Buteo swainsoni (Swainson's hawk)

www.nrfirescience.org/resource/10546

This FEIS species review synthesizes information on the relationship of *Buteo swainsoni* (Swainson's hawk) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general

management. This species review can be...

Author(s): Julie L. Tesky

Year Published: 1994

Type: Document

Synthesis

Solidago missouriensis (prairie goldenrod)

www.nrfirescience.org/resource/10917

This FEIS species review synthesizes information on the relationship of *Solidago missouriensis* (prairie goldenrod) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Roberta A. Walsh

Year Published: 1994

Type: Document

Synthesis

Agrostis stolonifera (creeping bentgrass)

www.nrfirescience.org/resource/10642

This FEIS species review synthesizes information on the relationship of *Agrostis stolonifera* (creeping bentgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Lora L. Esser

Year Published: 1994

Type: Document

Synthesis

Falco sparverius (American kestrel)

www.nrfirescience.org/resource/10542

This FEIS species review synthesizes information on the relationship of *Falco sparverius* (American kestrel) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Julie L. Tesky

Year Published: 1994

Type: Document

Synthesis

Bromus ciliatus (fringed brome)

www.nrfirescience.org/resource/10640

This FEIS species review synthesizes information on the relationship of *Bromus ciliatus* (fringed brome) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Lora L. Esser

Year Published: 1994

Type: Document

Synthesis

VA mycorrhizal status of burned and unburned sagebrush habitat

www.nrfirescience.org/resource/12154

Sagebrush is considered to be an obligate vesicular-arbuscular mycorrhizal plant. Some studies have shown that burning lowers the mycorrhizal inoculum potential (MIP) of the soil (Klopatek and others 1988, 1990; Wicklow-Howard 1989). If this happens, then sagebrush may take longer to reestablish after fire. A study was performed to...

Author(s): Jan E. Gurr, Marcia Wicklow-Howard

Year Published: 1994

Type: Document

Conference Proceedings, Technical Report or White Paper

Dumetella carolinensis (gray catbird)

www.nrfirescience.org/resource/10516

This FEIS species review synthesizes information on the relationship of *Dumetella carolinensis* (gray catbird) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Janet Sullivan

Year Published: 1994

Type: Document

Synthesis

Glycyrrhiza lepidota (wild licorice)

www.nrfirescience.org/resource/10631

This FEIS species review synthesizes information on the relationship of *Glycyrrhiza lepidota* (wild licorice) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Lora L. Esser

Year Published: 1994

Type: Document

Synthesis

Bufo boreas (western toad)

www.nrfirescience.org/resource/10859

This FEIS species review synthesizes information on the relationship of *Bufo boreas* (western toad) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used for...

Author(s): Janet Sullivan

Year Published: 1994

Type: Document

Synthesis

Proceedings-ecology and management of annual rangelands; 1992 May 18-21; Boise, ID

www.nrfirescience.org/resource/12046

Annual weeds continue to expand throughout the West eliminating many desirable species and plant communities. Wildfires are now common on lands infested with annual weeds, causing a loss of wildlife habitat and other natural resources. Measures can be used to reduce burning and restore native plant communities, but restoration is...

Author(s): Stephen B. Monsen, Stanley G. Kitchen

Year Published: 1994
Type: Document
Conference Proceedings, Technical Report or White Paper

Brachylagus idahoensis (pygmy rabbit)

www.nrfirescience.org/resource/10550

This FEIS species review synthesizes information on the relationship of *Brachylagus idahoensis* (pygmy rabbit) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Julie L. Tesky

Year Published: 1994

Type: Document

Synthesis

Simulating winter interactions among ungulates, vegetation, and fire in northern Yellowstone Park

www.nrfirescience.org/resource/8267

The interaction of large-scale fire, vegetation, and ungulates is an important management issue in Yellowstone National Park. A spatially explicit individual-based simulation model was developed to explore the effects of fire scale and pattern on the winter foraging dynamics and survival of free-ranging elk (*Cervus elaphus*) and...

Author(s): Monica G. Turner, Yegang Wu, Linda L. Wallace, William H. Romme, Antoinette Brenkert

Year Published: 1994

Type: Document

Book or Chapter or Journal Article

Buteo regalis (ferruginous hawk)

www.nrfirescience.org/resource/10545

This FEIS species review synthesizes information on the relationship of *Buteo regalis* (ferruginous hawk) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Julie L. Tesky

Year Published: 1994

Type: Document

Synthesis

Chamaebatiaria millefolium (desert sweet)

www.nrfirescience.org/resource/10765

This FEIS species review synthesizes information on the relationship of *Chamaebatiaria millefolium* (desert sweet) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Robin F. Matthews

Year Published: 1994

Type: Document

Synthesis

Bromus pumpellianus (Pumpelly brome)

www.nrfirescience.org/resource/10915

This FEIS species review synthesizes information on the relationship of *Bromus pumpellianus* (Pumpelly brome) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Roberta A. Walsh

Year Published: 1994

Type: Document

Synthesis

Accipiter striatus (sharp-shinned hawk)

www.nrfirescience.org/resource/10519

This FEIS species review synthesizes information on the relationship of *Accipiter striatus* (sharp-shinned hawk) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Janet Sullivan

Year Published: 1994

Type: Document

Synthesis

Agrostis exarata (spike bentgrass)

www.nrfirescience.org/resource/10641

This FEIS species review synthesizes information on the relationship of *Agrostis exarata* (spike bentgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Lora L. Esser

Year Published: 1994

Type: Document

Synthesis

Falco mexicanus (prairie falcon)

www.nrfirescience.org/resource/10541

This FEIS species review synthesizes information on the relationship of *Falco mexicanus* (prairie falcon) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Julie L. Tesky

Year Published: 1994

Type: Document

Synthesis

Factors influencing postfire sagebrush regeneration in south-central Idaho

www.nrfirescience.org/resource/12155

Sagebrush seedling establishment appeared to be strongly related to moisture availability as influenced by ecological site, soil surface texture, herbaceous competition, microtopography, seedling year precipitation, exposure, position on slope, etc. Many of the same factors influence seed source availability following wildfire and...

Author(s): Mike Boltz

Year Published: 1994

Type: Document
Conference Proceedings, Technical Report or White Paper

Ratibida columnifera (upright prairie coneflower)

www.nrfirescience.org/resource/10911

This FEIS species review synthesizes information on the relationship of *Ratibida columnifera* (upright prairie coneflower) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Roberta A. Walsh

Year Published: 1994

Type: Document

Synthesis

Prescribed burning considerations in sagebrush annual grassland communities

www.nrfirescience.org/resource/12152

Prescribed burning can be an effective tool to manage sagebrush grasslands. However, burning prescriptions for sagebrush grasslands vary depending on the management objectives, species composition of the community, and location. To develop successful fire prescriptions in these communities, consideration must first be given to the...

Author(s): G. Allen Rasmussen

Year Published: 1994

Type: Document

Conference Proceedings, Technical Report or White Paper

Postfire defoliation response of *Agropyron spicatum* and *Sitanion hystrix*

www.nrfirescience.org/resource/11446

Prescribed fire is an important management tool to increase herbaceous productivity and maintain seral communities of Intermountain sagebrush grasslands. Currently, pastures treated with prescribed fire are rested from livestock grazing before burning to allow fine fuel accumulation, and rested a full year following burning to...

Author(s): Steven J. Jirik, Stephen C. Bunting

Year Published: 1994

Type: Document

Book or Chapter or Journal Article

***Alectoris chukar* (chukar)**

www.nrfirescience.org/resource/10860

This FEIS species review synthesizes information on the relationship of *Alectoris chukar* (chukar) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used for...

Author(s): Janet Sullivan

Year Published: 1994

Type: Document

Synthesis

Fire conditions and pre- and postoccurrence of annual grasses on the Snake River Plain

www.nrfirescience.org/resource/12047

Fire has been an important factor in the development of the vegetation of the Snake River Plain. Prior

to Euro-American influence, fire helped determine the physiognomy and species composition of many communities. The occurrence of fire varied widely depending on the vegetation present, topography, and other factors. This impact can...

Author(s): Erin F. Peters, Stephen C. Bunting

Year Published: 1994

Type: Document

Conference Proceedings, Synthesis, Technical Report or White Paper

Tympanuchus phasianellus (sharp-tailed grouse)

www.nrfirescience.org/resource/10532

This FEIS species review synthesizes information on the relationship of Tympanuchus phasianellus (sharp-tailed grouse) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Julie L. Tesky

Year Published: 1994

Type: Document

Synthesis

Delphinium bicolor (low larkspur)

www.nrfirescience.org/resource/10778

This FEIS species review synthesizes information on the relationship of Delphinium bicolor (low larkspur) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Taraxacum officinale (common dandelion)

www.nrfirescience.org/resource/10448

This FEIS species review synthesizes information on the relationship of Taraxacum officinale (common dandelion) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general...

Author(s): Lora L. Esser

Year Published: 1993

Type: Document

Synthesis

Lupinus caudatus (tailcup lupine)

www.nrfirescience.org/resource/10775

This FEIS species review synthesizes information on the relationship of Lupinus caudatus (tailcup lupine) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Solidago canadensis (Canada goldenrod)

www.nrfirescience.org/resource/10618

This FEIS species review synthesizes information on the relationship of *Solidago canadensis* (Canada goldenrod) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Milo Coladonato

Year Published: 1993

Type: Document

Synthesis

Poa compressa (Canada bluegrass)

www.nrfirescience.org/resource/10578

This FEIS species review synthesizes information on the relationship of *Poa compressa* (Canada bluegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Ronald Uchytel

Year Published: 1993

Type: Document

Synthesis

Zigadenus paniculatus (foothill deathcamas)

www.nrfirescience.org/resource/10707

This FEIS species review synthesizes information on the relationship of *Zigadenus paniculatus* (foothill deathcamas) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Janet L. Howard

Year Published: 1993

Type: Document

Synthesis

Poa pratensis (Kentucky bluegrass)

www.nrfirescience.org/resource/10446

This FEIS species review synthesizes information on the relationship of *Poa pratensis* (Kentucky bluegrass) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management...

Author(s): Ronald Uchytel

Year Published: 1993

Type: Document

Synthesis

Vicia americana (American vetch)

www.nrfirescience.org/resource/10616

This FEIS species review synthesizes information on the relationship of *Vicia americana* (American vetch) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general

management. This species review can be...

Author(s): Milo Coladonato

Year Published: 1993

Type: Document

Synthesis

Wyethia amplexicaulis (mules-ears)

www.nrfirescience.org/resource/10771

This FEIS species review synthesizes information on the relationship of *Wyethia amplexicaulis* (mules-ears) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Liatris punctata (blazing star)

www.nrfirescience.org/resource/10920

This FEIS species review synthesizes information on the relationship of *Liatris punctata* (blazing star) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Roberta A. Walsh

Year Published: 1993

Type: Document

Synthesis

Branta canadensis (Canada goose)

www.nrfirescience.org/resource/10847

This FEIS species review synthesizes information on the relationship of *Branta canadensis* (Canada goose) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): S. A. Snyder

Year Published: 1993

Type: Document

Synthesis

Antennaria microphylla (rosy pussytoes)

www.nrfirescience.org/resource/10768

This FEIS species review synthesizes information on the relationship of *Antennaria microphylla* (rosy pussytoes) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Amaranthus retroflexus (rough pigweed)

www.nrfirescience.org/resource/10480

This FEIS species review synthesizes information on the relationship of *Amaranthus retroflexus* (rough pigweed) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general...

Author(s): Roberta A. Walsh

Year Published: 1993

Type: Document

Synthesis

Haliaeetus leucocephalus (bald eagle)

www.nrfirescience.org/resource/10843

This FEIS species review synthesizes information on the relationship of *Haliaeetus leucocephalus* (bald eagle) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): S. A. Snyder

Year Published: 1993

Type: Document

Synthesis

Collema tenax (black lichen)

www.nrfirescience.org/resource/10764

This FEIS species review synthesizes information on the relationship of *Collema tenax* (black lichen) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Lewisia rediviva (bitterroot)

www.nrfirescience.org/resource/10736

This FEIS species review synthesizes information on the relationship of *Lewisia rediviva* (bitterroot) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Janet L. Howard

Year Published: 1993

Type: Document

Synthesis

Rosa nutkana (Nootka rose)

www.nrfirescience.org/resource/10813

This FEIS species review synthesizes information on the relationship of *Rosa nutkana* (Nootka rose) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used for...

Author(s): William R. Reed

Year Published: 1993

Type: Document

Synthesis

Corydalis aurea (golden corydalis)

www.nrfirescience.org/resource/10762

This FEIS species review synthesizes information on the relationship of *Corydalis aurea* (golden corydalis) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Helianthus maximiliani (Maximilian sunflower)

www.nrfirescience.org/resource/10912

This FEIS species review synthesizes information on the relationship of *Helianthus maximiliani* (Maximilian sunflower) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Roberta A. Walsh

Year Published: 1993

Type: Document

Synthesis

Arnica cordifolia (heartleaf arnica)

www.nrfirescience.org/resource/10811

This FEIS species review synthesizes information on the relationship of *Arnica cordifolia* (heartleaf arnica) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): William R. Reed

Year Published: 1993

Type: Document

Synthesis

Marchantia polymorpha (liverwort)

www.nrfirescience.org/resource/10757

This FEIS species review synthesizes information on the relationship of *Marchantia polymorpha* (liverwort) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Anas crecca (green-winged teal)

www.nrfirescience.org/resource/10556

This FEIS species review synthesizes information on the relationship of *Anas crecca* (green-winged teal) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Julie L. Tesky

Year Published: 1993

Type: Document

Synthesis

Zenaida macroura (mourning dove)

www.nrfirescience.org/resource/10531

This FEIS species review synthesizes information on the relationship of *Zenaida macroura* (mourning dove) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Julie L. Tesky

Year Published: 1993

Type: Document

Synthesis

Phleum pratense (timothy)

www.nrfirescience.org/resource/10449

This FEIS species review synthesizes information on the relationship of *Phleum pratense* (timothy) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This...

Author(s): Lora L. Esser

Year Published: 1993

Type: Document

Synthesis

Delphinium occidentale (duncecap larkspur)

www.nrfirescience.org/resource/10777

This FEIS species review synthesizes information on the relationship of *Delphinium occidentale* (duncecap larkspur) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Anas strepera (gadwall)

www.nrfirescience.org/resource/10553

This FEIS species review synthesizes information on the relationship of *Anas strepera* (gadwall) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used for...

Author(s): Julie L. Tesky

Year Published: 1993

Type: Document

Synthesis

Panicum virgatum (switchgrass)

www.nrfirescience.org/resource/10580

This FEIS species review synthesizes information on the relationship of *Panicum virgatum* (switchgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Ronald Uchytel

Year Published: 1993

Type: Document

Synthesis

Anas acuta (northern pintail)

www.nrfirescience.org/resource/10527

This FEIS species review synthesizes information on the relationship of *Anas acuta* (northern pintail) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Julie L. Tesky

Year Published: 1993

Type: Document

Synthesis

Lupinus sericeus (silky lupine)

www.nrfirescience.org/resource/10774

This FEIS species review synthesizes information on the relationship of *Lupinus sericeus* (silky lupine) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Trifolium repens (white clover)

www.nrfirescience.org/resource/10617

This FEIS species review synthesizes information on the relationship of *Trifolium repens* (white clover) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Milo Coladonato

Year Published: 1993

Type: Document

Synthesis

Grindelia squarrosa (curlycup gumweed)

www.nrfirescience.org/resource/10922

This FEIS species review synthesizes information on the relationship of *Grindelia squarrosa* (curlycup gumweed) to fire--how fire affects the species and its habitat, and fire management considerations.

Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Roberta A. Walsh

Year Published: 1993

Type: Document

Synthesis

Anas platyrhynchos (mallard)

www.nrfirescience.org/resource/10848

This FEIS species review synthesizes information on the relationship of *Anas platyrhynchos* (mallard) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): S. A. Snyder

Year Published: 1993

Type: Document

Synthesis

Oxytropis sericea (whitepoint locoweed)

www.nrfirescience.org/resource/10643

This FEIS species review synthesizes information on the relationship of *Oxytropis sericea* (whitepoint locoweed) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Lora L. Esser

Year Published: 1993

Type: Document

Synthesis

Circus cyaneus (northern harrier)

www.nrfirescience.org/resource/10845

This FEIS species review synthesizes information on the relationship of *Circus cyaneus* (northern harrier) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): S. A. Snyder

Year Published: 1993

Type: Document

Synthesis

Claytonia perfoliata (miner's-lettuce)

www.nrfirescience.org/resource/10763

This FEIS species review synthesizes information on the relationship of *Claytonia perfoliata* (miner's-lettuce) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Eurybia conspicua (showy aster)

www.nrfirescience.org/resource/10812

This FEIS species review synthesizes information on the relationship of *Eurybia conspicua* (showy aster) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): William R. Reed

Year Published: 1993

Type: Document

Synthesis

Ovis canadensis (bighorn sheep)

www.nrfirescience.org/resource/10536

This FEIS species review synthesizes information on the relationship of *Ovis canadensis* (bighorn sheep) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Julie L. Tesky

Year Published: 1993

Type: Document

Synthesis

Dracocephalum parviflorum (American dragonhead)

www.nrfirescience.org/resource/10761

This FEIS species review synthesizes information on the relationship of *Dracocephalum parviflorum* (American dragonhead) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Robin F. Matthews

Year Published: 1993

Type: Document

Synthesis

Atriplex gardneri (Gardner's saltbush)

www.nrfirescience.org/resource/10810

This FEIS species review synthesizes information on the relationship of *Atriplex gardneri* (Gardner's saltbush) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): William R. Reed

Year Published: 1993

Type: Document

Synthesis

Tortula ruralis (twisted moss)

www.nrfirescience.org/resource/10756

This FEIS species review synthesizes information on the relationship of *Tortula ruralis* (twisted moss) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Robin F. Matthews
Year Published: 1993
Type: Document
Synthesis

Anas discors (blue-winged teal)

www.nrfirescience.org/resource/10557

This FEIS species review synthesizes information on the relationship of *Anas discors* (blue-winged teal) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Julie L. Tesky
Year Published: 1993
Type: Document
Synthesis

Ceratodon purpureus (fire moss)

www.nrfirescience.org/resource/10529

This FEIS species review synthesizes information on the relationship of *Ceratodon purpureus* (fire moss) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Julie L. Tesky
Year Published: 1992
Type: Document
Synthesis

Erodium cicutarium (cutleaf filaree)

www.nrfirescience.org/resource/10462

This FEIS species review synthesizes information on the relationship of *Erodium cicutarium* (cutleaf filaree) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general...

Author(s): Janet L. Howard
Year Published: 1992
Type: Document
Synthesis

Elymus trachycaulus (slender wheatgrass)

www.nrfirescience.org/resource/10722

This FEIS species review synthesizes information on the relationship of *Elymus trachycaulus* (slender wheatgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Janet L. Howard
Year Published: 1992
Type: Document
Synthesis

Hordeum jubatum (foxtail barley)

www.nrfirescience.org/resource/10539

This FEIS species review synthesizes information on the relationship of *Hordeum jubatum* (foxtail barley) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Julie L. Tesky

Year Published: 1992

Type: Document

Synthesis

Salix boothii (Booth willow)

www.nrfirescience.org/resource/10637

This FEIS species review synthesizes information on the relationship of *Salix boothii* (Booth willow) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Lora L. Esser

Year Published: 1992

Type: Document

Synthesis

Calamagrostis canadensis (bluejoint reedgrass)

www.nrfirescience.org/resource/10558

This FEIS species review synthesizes information on the relationship of *Calamagrostis canadensis* (bluejoint reedgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Julie L. Tesky

Year Published: 1992

Type: Document

Synthesis

Elymus repens (quackgrass)

www.nrfirescience.org/resource/10470

This FEIS species review synthesizes information on the relationship of *Elymus repens* (quackgrass) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This...

Author(s): S. A. Snyder

Year Published: 1992

Type: Document

Synthesis

Symphiotrichum leave (smooth blue American-aster)

www.nrfirescience.org/resource/10861

This FEIS species review synthesizes information on the relationship of *Symphiotrichum leave* (smooth blue American-aster) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Janet Sullivan

Year Published: 1992

Type: Document
Synthesis

Halogeton glomeratus (halogeton)

www.nrfirescience.org/resource/10468

This FEIS species review synthesizes information on the relationship of Halogeton glomeratus (halogeton) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management....

Author(s): Diane S. Pavsek

Year Published: 1992

Type: Document

Synthesis

Maianthemum stellatum (starry Solomon's-seal)

www.nrfirescience.org/resource/10686

This FEIS species review synthesizes information on the relationship of Maianthemum stellatum (starry Solomon's-seal) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): James R. Habeck

Year Published: 1992

Type: Document

Synthesis

Xanthium strumarium (common cocklebur)

www.nrfirescience.org/resource/10445

This FEIS species review synthesizes information on the relationship of Xanthium strumarium (common cocklebur) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general...

Author(s): Ronald Uchytel

Year Published: 1992

Type: Document

Synthesis

Agrostis scabra (ticklegrass)

www.nrfirescience.org/resource/10769

This FEIS species review synthesizes information on the relationship of Agrostis scabra (ticklegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Robin F. Matthews

Year Published: 1992

Type: Document

Synthesis

Schoenoplectus americanus (Olney's threesquare bulrush)

www.nrfirescience.org/resource/10565

This FEIS species review synthesizes information on the relationship of Schoenoplectus americanus

(Olney's threesquare bulrush) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This...

Author(s): Ronald Uchytel

Year Published: 1992

Type: Document

Synthesis

Medicago sativa (alfalfa)

www.nrfirescience.org/resource/10475

This FEIS species review synthesizes information on the relationship of *Medicago sativa* (alfalfa) to fire--how fire affects the species and its habitat, invasiveness of the species, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This...

Author(s): Janet Sullivan

Year Published: 1992

Type: Document

Synthesis

Achnatherum richardsonii (Richardson needlegrass)

www.nrfirescience.org/resource/10638

This FEIS species review synthesizes information on the relationship of *Achnatherum richardsonii* (Richardson needlegrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Lora L. Esser

Year Published: 1992

Type: Document

Synthesis

Salix bebbiana (Bebb willow)

www.nrfirescience.org/resource/10563

This FEIS species review synthesizes information on the relationship of *Salix bebbiana* (Bebb willow) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Julie L. Tesky

Year Published: 1992

Type: Document

Synthesis

Spiraea betulifolia (white spirea)

www.nrfirescience.org/resource/10683

This FEIS species review synthesizes information on the relationship of *Spiraea betulifolia* (white spirea) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): James R. Habeck

Year Published: 1991

Type: Document

Synthesis

Spartina pectinata (prairie cordgrass)

www.nrfirescience.org/resource/10906

This FEIS species review synthesizes information on the relationship of *Spartina pectinata* (prairie cordgrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Crystal J. Walkup

Year Published: 1991

Type: Document

Synthesis

Arctostaphylos uva-ursi (kinnikinnick)

www.nrfirescience.org/resource/10626

This FEIS species review synthesizes information on the relationship of *Arctostaphylos uva-ursi* (kinnikinnick) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Marilyn F. Crane

Year Published: 1991

Type: Document

Synthesis

Salix planifolia (planeleaf willow)

www.nrfirescience.org/resource/10568

This FEIS species review synthesizes information on the relationship of *Salix planifolia* (planeleaf willow) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Ronald Uchytel

Year Published: 1991

Type: Document

Synthesis

Salix drummondiana (Drummond willow)

www.nrfirescience.org/resource/10566

This FEIS species review synthesizes information on the relationship of *Salix drummondiana* (Drummond willow) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Ronald Uchytel

Year Published: 1991

Type: Document

Synthesis

Salix geyeriana (Geyer willow)

www.nrfirescience.org/resource/10564

This FEIS species review synthesizes information on the relationship of *Salix geyeriana* (Geyer willow) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This

species review can be used...

Author(s): Ronald Uchytel

Year Published: 1991

Type: Document

Synthesis

Hesperostipa spartea (porcupine grass)

www.nrfirescience.org/resource/10910

This FEIS species review synthesizes information on the relationship of *Hesperostipa spartea* (porcupine grass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Crystal J. Walkup

Year Published: 1991

Type: Document

Synthesis

Sorghastrum nutans (Indiangrass)

www.nrfirescience.org/resource/10907

This FEIS species review synthesizes information on the relationship of *Sorghastrum nutans* (Indiangrass) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Crystal J. Walkup

Year Published: 1991

Type: Document

Synthesis

FTIR remote sensing of biomass burning emissions of CO₂, CO, CH₄, CH₂O, NO, NO₂, NH₃, and N₂O

www.nrfirescience.org/resource/8301

This work introduces remote sensing of biomass burning emissions using high-resolution Fourier transform infrared (FTIR) absorption spectroscopy over open paths in smoke plumes from biomass fires. There are several advantages to this type of smoke composition measurement, which address some of the disadvantages of previous...

Author(s): David W. T. Griffith, William G. Mankin, Michael T. Coffey, Darold E. Ward, Allen R. Riebau

Year Published: 1991

Type: Document

Book or Chapter or Journal Article

Odocoileus virginianus (white-tailed deer)

www.nrfirescience.org/resource/10840

This FEIS species review synthesizes information on the relationship of *Odocoileus virginianus* (white-tailed deer) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): S. A. Snyder

Year Published: 1991

Type: Document

Synthesis

Fuel moisture as measured and predicted during the 1988 fires in Yellowstone National Park

www.nrfirescience.org/resource/11109

Fine fuel moisture content, relative humidity, air temperature, and fire behavior were observed hourly for 48 hours on the North Fork Fire in Yellowstone National Park from August 25 to August 27, 1988. Fine fuel reached minimum moisture content of 3 to 5 percent late in the afternoon, remained below 8 percent until after midnight,...

Author(s): Roberta A. Hartford, Richard C. Rothermel

Year Published: 1991

Type: Document

Research Brief or Fact Sheet

Crataegus douglasii (Douglas hawthorn)

www.nrfirescience.org/resource/10690

This FEIS species review synthesizes information on the relationship of *Crataegus douglasii* (Douglas hawthorn) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): James R. Habeck

Year Published: 1991

Type: Document

Synthesis

Shepherdia canadensis (russet buffaloberry)

www.nrfirescience.org/resource/10909

This FEIS species review synthesizes information on the relationship of *Shepherdia canadensis* (russet buffaloberry) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review...

Author(s): Crystal J. Walkup

Year Published: 1991

Type: Document

Synthesis

Celtis reticulata (netleaf hackberry)

www.nrfirescience.org/resource/10891

This FEIS species review synthesizes information on the relationship of *Celtis reticulata* (netleaf hackberry) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): D. A. Tirmenstein

Year Published: 1990

Type: Document

Synthesis

Selaginella densa (little spikemoss)

www.nrfirescience.org/resource/10622

This FEIS species review synthesizes information on the relationship of *Selaginella densa* (little spikemoss) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Marilyn F. Crane
Year Published: 1990
Type: Document
Synthesis

Erythronium grandiflorum (glacier lily)

www.nrfirescience.org/resource/10932

This FEIS species review synthesizes information on the relationship of *Erythronium grandiflorum* (glacier lily) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can...

Author(s): Tara Y. Williams
Year Published: 1990
Type: Document
Synthesis

Effects of fire in the northern Great Plains

www.nrfirescience.org/resource/11184

Fire has been used inconsistently to manage native and tame grasslands in the Northern Great Plains (NGP) of the north-central U.S. and south-central Canada, particularly the grasslands found in prairies, plains, agricultural land retirement programs, and moist soil sites. This has happened for three primary reasons: (1) the...

Author(s): Kenneth F. Higgins, Arnold D. Kruse, James L. Piehl
Year Published: 1989
Type: Document
Synthesis, Technical Report or White Paper

Alnus rhombifolia (white alder)

www.nrfirescience.org/resource/10576

This FEIS species review synthesizes information on the relationship of *Alnus rhombifolia* (white alder) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used...

Author(s): Ronald Uchytel
Year Published: 1989
Type: Document
Synthesis

Salix lucida subsp. lasiandra (Pacific willow)

www.nrfirescience.org/resource/10577

This FEIS species review synthesizes information on the relationship of *Salix lucida* subsp. *lasiandra* (Pacific willow) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species...

Author(s): Ronald Uchytel
Year Published: 1989
Type: Document
Synthesis

Salix lutea (yellow willow)

www.nrfirescience.org/resource/10567

This FEIS species review synthesizes information on the relationship of *Salix lutea* (yellow willow) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used for...

Author(s): Ronald Uchytel

Year Published: 1989

Type: Document

Synthesis

Acer negundo (boxelder)

www.nrfirescience.org/resource/10823

This FEIS species review synthesizes information on the relationship of *Acer negundo* (boxelder) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be used for...

Author(s): Lynn Rosario

Year Published: 1988

Type: Document

Synthesis

Andropogon gerardii (big bluestem)

www.nrfirescience.org/resource/10573

This FEIS species review synthesizes information on the relationship of *Andropogon gerardii* (big bluestem) to fire--how fire affects the species and its habitat, and fire management considerations. Information is also provided on the species' taxonomy, distribution, basic biology, and general management. This species review can be...

Author(s): Ronald Uchytel

Year Published: 1988

Type: Document

Synthesis

Guidelines for prescribed burning sagebrush-grass rangelands in the northern Great Basin

www.nrfirescience.org/resource/11256

Summarizes recent literature on the effects of fire on sagebrush-grass vegetation. Also outlines procedures and considerations for planning and conducting prescribed fires and monitoring effects. Includes a comprehensive annotated bibliography of the fire-sagebrush-grass literature published since 1980.

Author(s): Stephen C. Bunting, Bruce M. Kilgore, Charles L. Bushey

Year Published: 1987

Type: Document

Technical Report or White Paper

Bighorn sheep and fire: seven case histories

www.nrfirescience.org/resource/11057

Responses of seven bighorn sheep populations and habitats to prescribed fire and wildfire in southern British Columbia, Idaho, and Glacier National Park ranged from no influence to increase; interacting factors such as lungworm infection, livestock grazing, and reduction in forage overrode potential benefits of subsequent increases...

Author(s): James M. Peek, Raymond A. Demarchi, Dennis A. Demarchi

Year Published: 1985

Type: Document
Conference Proceedings, Technical Report or White Paper

Rangeland fire effects

www.nrfirescience.org/resource/11003

Description not entered

Author(s): Ken Sanders, Jack Durham

Year Published: 1985

Type: Document

Conference Proceedings

Fire ecology of antelope bitterbrush in the Northern Rocky Mountains

www.nrfirescience.org/resource/11058

Frequency of resprouting and number of newly established seedlings of antelope bitterbrush were sampled on sites burned by prescribed burns and wildfires 3 to 10 years previously to determine the effect of habitat type, growth form, and season of the burn on bitterbrush. Significant differences in resprouting response occurred among...

Author(s): Stephen C. Bunting, Leon F. Neuenschwander, George E. Gruell

Year Published: 1985

Type: Document

Conference Proceedings, Technical Report or White Paper

Estimating postfire changes in production and value of northern rocky mountain-intermountain rangelands

www.nrfirescience.org/resource/11222

A simulation model was developed to estimate postfire changes in the production and value of grazing lands in the Northern Rocky Mountain-Intermountain region. Ecological information and management decisions were used to simulate expected changes in production and value after wildfire in six major rangeland types: permanent forested...

Author(s): David L. Peterson, Patrick J. Flowers

Year Published: 1984

Type: Document

Technical Report or White Paper

Fire and vegetative trends in the Northern Rockies: interpretations from 1871-1982 photographs

www.nrfirescience.org/resource/11260

Interprets changes in forest and range vegetation resulting from the absence of fire. Eighty-six matched photographs covering the period 1871-1982 provide the basis for describing how vegetation has changed in various plant communities. These scenes show that woody vegetation has increased markedly as a result of reduced wildfire....

Author(s): George E. Gruell

Year Published: 1983

Type: Document

Technical Report or White Paper

Fuel and fire behavior prediction in big sagebrush

www.nrfirescience.org/resource/11957

Relationships between height of big sagebrush and crown area, fuel loading, bulk density, size distribution of foliage and stemwood, and fraction dead stemwood are presented. Based upon these relationships, modeled rate-of-fire spread and fireline intensity are shown for sagebrush ranging in

height from 20 to 120 cm and in coverage...

Author(s): James K. Brown

Year Published: 1982

Type: Document

Technical Report or White Paper

The sagebrush-grass region: A review of the ecological literature

www.nrfirescience.org/resource/15435

The objective of this paper is to provide a comprehensive review of literature on the vegetation of the sage brush region of North America. Despite its prime importance as a grazing resource, and the problems produced by its use and misuse, research on this large and varied ecosystem was quite limited during the first half of this...

Author(s): E.W. Tisdale, M. Hironaka

Year Published: 1981

Type: Document

Synthesis

Fire's influence on wildlife habitat on the Bridger-Teton National Forest, Wyoming - Volume II: changes and causes, management implications

www.nrfirescience.org/resource/12126

Provides information on wildlife habitat condition and trend on the Bridger-Teton National Forest in the Jackson Hole Region of Wyoming by analysis of broad plant communities. Visual evidence of condition and trend are provided in Volume I, The Photo Record. Management implications are included.

Author(s): George E. Gruell

Year Published: 1980

Type: Document

Technical Report or White Paper

Fire's influence on wildlife habitat on the Bridger-Teton National Forest, Wyoming - Volume I: photographic record and analysis

www.nrfirescience.org/resource/12151

The Bridger-Teton National Forest in the Jackson Hole Region of Wyoming has long been recognized for its wildlife resource. Management efforts have emphasized the measurement of forage utilization by elk (*Cervus canadensis nelsoni*) and their effect on summer and winter ranges. Less consideration has been given to other biotic and...

Author(s): George E. Gruell

Year Published: 1980

Type: Document

Technical Report or White Paper

The role and use of fire in sagebrush-grass and pinyon-juniper plant communities: a state-of-the-art review

www.nrfirescience.org/resource/11908

Fire frequencies averaged 32 to 70 years in sagebrush-grass communities. Early spring and late fall fires are the least harmful to perennial grasses, although small plants and those with coarse stems are more tolerant of fire than large plants and those with leafy stems. Cheatgrass can be suppressed by burning in early summer, but...

Author(s): Henry A. Wright, Leon F. Neuenschwander, Carlton M. Britton

Year Published: 1979

Type: Document

Synthesis, Technical Report or White Paper

Porosity of cheatgrass fuel related to weight

www.nrfirescience.org/resource/11922

Porosity (expressed as the ratio of air space surrounding plant material to surface area of plant material) was determined for a low forage producing community of cheatgrass. Porosity averaged 12.5 cm.³/cm.²- and correlated closely with weight per square meter. Estimation of porosity from weight per unit of ground area is a...

Author(s): James K. Brown

Year Published: 1969

Type: Document

Research Brief or Fact Sheet

Landscape science solutions for resource managers

www.nrfirescience.org/resource/13217

Jerry Tagestad, Sr. Research Scientist with the Pacific Northwest National Laboratory, will discuss deriving information from geospatial data, and a recently developed fire risk model and how it might be adapted for the Great Basin. The ability to make informed decisions about landscape condition and fire risk usually isn't limited...

Type: Media

Webinar

A science framework for assessing threats to sagebrush ecosystems and greater sage-grouse and prioritizing conservation and restoration actions

www.nrfirescience.org/resource/14880

On September 26, Jeanne Chambers, U.S. Forest Service Rocky Mountain Research Station, and Steve Hanser, U.S. Geological Survey, discussed the tools and methods developed as part of the Science Framework for the Conservation and Restoration Strategy of Sec. Order 3336. Department of the Interior Secretary Order 3336 called for...

Type: Media

Webinar

Quantifying biomass and fuels for non-forest lands of the coterminous US

www.nrfirescience.org/resource/12812

Dr. Matt Reeves presented a webinar on May 14, 2013 on a satellite based fuel updating protocol for estimating surface Fire Behavior Fuel Models for U.S. rangelands. Current fire behavior and decision support systems such as Wildand Fire Decision Support System (WFDSS) and Rapid Assessment of Values at risk (RAVAR) require up-to-...

Type: Media

Webinar

Big sagebrush ecosystem response to changing climate and disturbance

www.nrfirescience.org/resource/14400

Over the past few years, the USFWS R6 Science Applications program has been able to support several important research studies to increase our understanding of the response of sagebrush ecosystems in a changing world. Results of the completed and ongoing studies will have multiple applications to the Service's (and our partners)...

Type: Media

Webinar

Sagebrush responses to shifting climate and fire disturbances

www.nrfirescience.org/resource/14380

This presentation addresses issues confronting preservation and restoration of big sagebrush, focusing on climate, wildfire, and invasives. Preliminary and published insights on climate responses of sagebrush and implications for vulnerability assessments and post-fire restoration will be described. Responses of big sagebrush and...

Type: Media

Webinar

Climate, weather, and sagebrush seed sources: experimental insights on challenges and opportunities

www.nrfirescience.org/resource/13219

Matt Germino, Research Ecologist, USGS Snake River Field Station, Boise, ID, discusses experimental insights on challenges and opportunities regarding climate, weather, and sagebrush seed sources.

Type: Media

Webinar

Vulnerability of tree species and biome types to climate change in the U.S. Northern Rocky Mountains and Yellowstone

www.nrfirescience.org/resource/13043

This presentation assesses components of vulnerability of tree species and biome types to projected future climate within the Great Northern Landscape Conservation Cooperative (GNLCC) in the US Northern Rockies and the ecosystems surrounding Glacier and Yellowstone/Grand Teton National Parks. We drew on the results of five published...

Type: Media

Webinar

Using state and transition simulation models to guide sustainable management of ecosystems: three case studies from across the US

www.nrfirescience.org/resource/14867

This webinar was conducted as a part of the Climate Change Science and Management Webinar Series, put on by the USGS National Climate Change and Wildlife Science Center and the FWS National Conservation Training Center. Sustainable management of natural resources under competing demands is challenging, particularly when facing novel...

Type: Media

Webinar

Sage-grouse forb preference by 12 plant categories

www.nrfirescience.org/resource/14725

There are hundreds of native and non-native forbs in the sagebrush steppe, but which are valuable as sage-grouse food? Sage-grouse lack a stony gizzard to digest hard structures so they are limited in what they can eat. A review of the literature on forbs utilized by sage-grouse, knowledge of plant chemical composition, and plant...

Type: Media

Webinar

Inter-LCC greater sage-grouse research projects: results and applications to inform landscape-scale management

www.nrfirescience.org/resource/14493

In 2012, Region 6 of the US Fish and Wildlife Service (USFWS) obtained Inter-LCC Science Funding to

support original research and development of decision support tools to further landscape-scale conservation of Greater sage-grouse within and across the four Landscape Conservation Cooperatives (LCC) comprising the birds' range....

Type: Media

Webinar

National forest and rangeland management initiative webinar: rangeland management strategies and tools

www.nrfirescience.org/resource/15116

The Western Governors' Association webinar "Rangeland Management Strategies and Tools: Promoting Resiliency and Addressing Invasive Species" examined new developments for increased resilience to the threats posed to western rangelands by invasive species, drought, wildfire and other stressors. Panelists discussed techniques that...

Type: Media

Webinar

Maximizing minimums: mapping basic requirements for greater sage-grouse

www.nrfirescience.org/resource/14381

Mapping broad regional distributions of a species can be limited by availability of consistent data. Statistical models also face trade-offs between model fit and prediction: results derived from local studies often fail when applied to new environments outside the original inference space. We used a method first described in 1901...

Type: Media

Webinar

Using resilience and resistance concepts to manage threats to sagebrush ecosystems and sage-grouse

www.nrfirescience.org/resource/14379

This webinar discusses a strategic approach developed by an interagency, Western Association of Fish and Wildlife Agencies working group for conservation of sagebrush ecosystems, Gunnison sage-grouse, and greater sage-grouse. It uses information on (1) factors that influence sagebrush ecosystem resilience to disturbance and...

Type: Media

Webinar

Rangeland Management Strategies and Tools: Promoting Resiliency and Addressing Invasive Species

www.nrfirescience.org/resource/15931

The Western Governors' Association webinar "Rangeland Management Strategies and Tools: Promoting Resiliency and Addressing Invasive Species" examined new developments for increased resilience to the threats posed to western rangelands by invasive species, drought, wildfire and other stressors. Panelists discussed techniques that...

Type: Media

Webinar