

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

[www.nrfirescience.org/resource/14922](http://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

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

[www.nrfirescience.org/resource/14924](http://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

## **Spatiotemporal variability of wildland fuels in US Northern Rocky Mountain forests**

[www.nrfirescience.org/resource/14689](http://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](http://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](http://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

### **The integrated rangeland fire management strategy actionable science plan**

[www.nrfirescience.org/resource/14697](http://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

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

[www.nrfirescience.org/resource/14889](http://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

### **A state-and-transition simulation modeling approach for estimating the historical range of variability**

[www.nrfirescience.org/resource/13078](http://www.nrfirescience.org/resource/13078)

Reference ecological conditions offer important context for land managers as they assess the condition of their landscapes and provide benchmarks for desired future conditions. State-and-transition simulation models (STSMs) are commonly used to estimate reference conditions that can be used to evaluate current ecosystem conditions...

Author(s): Kori Blankenship, Leonardo Frid, James L. Smith

Year Published: 2015

Type: Document

Book or Chapter or Journal Article

### **Fire behavior in masticated fuels: a review**

[www.nrfirescience.org/resource/12387](http://www.nrfirescience.org/resource/12387)

Mastication is an increasingly common fuels treatment that redistributes 'ladder' fuels to the forest floor to reduce vertical fuel continuity, crown fire potential, and fireline intensity, but fuel models do not exist for predicting fire behavior in these fuel types. Recent fires burning in masticated fuels have behaved in...

Author(s): Jesse K. Kreye, Nolan W. Brewer, Penelope Morgan, J. Morgan Varner, Alistair M. S. Smith, Chad M. Hoffman, Roger D. Ottmar

Year Published: 2014

Type: Document  
Book or Chapter or Journal Article, Synthesis

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

[www.nrfirescience.org/resource/12148](http://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

### **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](http://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

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

[www.nrfirescience.org/resource/12146](http://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

### **Fire effects on basal area, tiller production, and mortality of the C4 bunchgrass, purple threeawn**

[www.nrfirescience.org/resource/12045](http://www.nrfirescience.org/resource/12045)

Fire behavior associated with wild and prescribed fires is variable, but plays a vital role in how a plant responds to fire. Understanding the relationship between fire behavior and rangeland plant community response will help to improve the use of prescribed fire to achieve management objectives. Fire is an important ecological...

Author(s): Dustin J. Strong, Amy C. Ganguli, Lance T. Vermeire

Year Published: 2013

Type: Document  
Book or Chapter or Journal Article

### **Fire and nitrogen effects on purple threeawn (*Aristida purpurea*) abundance in northern mixed-grass prairie old fields**

[www.nrfirescience.org/resource/12019](http://www.nrfirescience.org/resource/12019)

Purple threeawn (*Aristida purpurea* Nutt. varieties) is a native grass capable of increasing on rangelands, forming near monocultures, and creating a stable state. Productive rangelands throughout the Great Plains and Intermountain West have experienced increases in purple threeawn abundance, reducing overall forage quality. Our...

Author(s): Dustin J. Strong, Lance T. Vermeire, Amy C. Ganguli

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](http://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

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

[www.nrfirescience.org/resource/12147](http://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

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

[www.nrfirescience.org/resource/12132](http://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

### **Influence of recent bark beetle outbreak on fire severity and postfire tree regeneration in montane Douglas-fir forests**

[www.nrfirescience.org/resource/12029](http://www.nrfirescience.org/resource/12029)

Understanding how disturbances interact to shape ecosystems is a key challenge in ecology. In forests of western North America, the degree to which recent bark beetle outbreaks and subsequent fires may be linked (e.g., outbreak severity affects fire severity) and/or whether these two disturbances produce compound effects on postfire...

Author(s): Brian J. Harvey, Daniel C. Donato, William H. Romme, Monica G. Turner

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

### **Hydrologic and erosion responses of sagebrush steppe following juniper encroachment, wildfire, and tree cutting**

[www.nrfirescience.org/resource/12128](http://www.nrfirescience.org/resource/12128)

Extensive woodland expansion in the Great Basin has generated concern regarding ecological impacts of tree encroachment on sagebrush rangelands and strategies for restoring sagebrush steppe. This study used rainfall (0.5 m<sup>2</sup> and 13 m<sup>2</sup> scales) and concentrated flow simulations and measures of vegetation, ground cover, and soils to...

Author(s): Frederick B. Pierson, Stuart P. Hardegree, Patrick E. Clark, Patrick R. Kormos, Osama Z. Al-Hamdan

Year Published: 2013

Type: Document

Book or Chapter or Journal Article

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

[www.nrfirescience.org/resource/12011](http://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

### **Effects of climatic variability and change on forest ecosystems: a comprehensive science synthesis for the U.S. forest sector**

[www.nrfirescience.org/resource/12567](http://www.nrfirescience.org/resource/12567)

This report is a scientific assessment of the current condition and likely future condition of forest resources in the United States relative to climatic variability and change. It serves as the U.S. Forest Service forest sector technical report for the National Climate Assessment and includes descriptions of key regional issues and...

Year Published: 2012

Type: Document

Synthesis, Technical Report or White Paper

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

[www.nrfirescience.org/resource/8355](http://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

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

[www.nrfirescience.org/resource/10525](http://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

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

[www.nrfirescience.org/resource/10794](http://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

### **Landscape composition in aspen woodlands under various modeled fire regimes**

[www.nrfirescience.org/resource/12114](http://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

### **Bark beetle outbreaks, wildfires and defensible space: how much area do we need to treat to protect homes and communities?**

[www.nrfirescience.org/resource/8340](http://www.nrfirescience.org/resource/8340)

Extensive beetle outbreaks across western North American forests have spurred debates about how to best protect communities from wildfire. Previous work has found that fuels in the wildland-urban interface and especially in the defensible space (40-m radius) around structures are the most important determinants of the flammability...

Author(s): Glen Aronson, Dominik Kulakowski, Glen Aronson, Dominik Kulakowski

Year Published: 2012

Type: Document

Book or Chapter or Journal Article

### **Effects of fuels reductions on plant communities and soils in a piñon-juniper woodland**

[www.nrfirescience.org/resource/8326](http://www.nrfirescience.org/resource/8326)

Over the past decade, a variety of fuels reduction strategies have been implemented across western US forests to lower the risk of high severity fires. In two separate studies, we evaluated the short-term effects of hand thinning and mechanical mastication on understory plant communities and soil resources in an upland Piñon-...

Author(s): Matthew R. Ross, S. C. Castle, Nichole N. Barger

Year Published: 2012

Type: Document

Book or Chapter or Journal Article

### **Odocoileus hemionus (mule deer)**

[www.nrfirescience.org/resource/10521](http://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

### **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](http://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. McIver, 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

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

[www.nrfirescience.org/resource/10657](http://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

### **Fire, plant invasions, and erosion events on western rangelands**

[www.nrfirescience.org/resource/8290](http://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

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

[www.nrfirescience.org/resource/11108](http://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

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

[www.nrfirescience.org/resource/10660](http://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

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

[www.nrfirescience.org/resource/10451](http://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

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

[www.nrfirescience.org/resource/10661](http://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

### **Holodiscus discolor (oceanspray)**

[www.nrfirescience.org/resource/10653](http://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

### **Euphorbia cyparissias (cypress spruce)**

[www.nrfirescience.org/resource/10455](http://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

### **Coronilla varia (crownvetch)**

[www.nrfirescience.org/resource/10452](http://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

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

[www.nrfirescience.org/resource/10520](http://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

### **Blister rust and western forest biodiversity: ecology, values and outlook for white pines**

[www.nrfirescience.org/resource/8234](http://www.nrfirescience.org/resource/8234)

Eight white pine species are widely distributed among the forests of western Canada and the United States. The different forest communities with these species contribute biodiversity to the western landscape. The trees themselves provide various ecosystem services, including wildlife habitat and watershed protection. White pine...

Author(s): Diana F. Tomback, Peter Achuff

Year Published: 2010

Type: Document

Book or Chapter or Journal Article, Synthesis

### **Ailanthus altissima (tree-of-heaven)**

[www.nrfirescience.org/resource/10450](http://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

### **Falco peregrinus (peregrine falcon)**

[www.nrfirescience.org/resource/10748](http://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

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

[www.nrfirescience.org/resource/10456](http://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

### **Silvicultural management of white pines in western North America**

[www.nrfirescience.org/resource/8235](http://www.nrfirescience.org/resource/8235)

Since the introduction prior to 1915 of white pine blister rust (*Cronartium ribicola*) into the forests of western North America, many populations of native white pine species have seriously declined. Because western white pine (*Pinus monticola*) and sugar pine (*P. lambertiana*) are highly valued timber species, their silviculture...

Author(s): Stefan Zeglen, John Pronos, H. Merler

Year Published: 2010  
Type: Document  
Book or Chapter or Journal Article

### **Current health issues and management strategies for white pines in the western United States and Canada**

[www.nrfirescience.org/resource/8233](http://www.nrfirescience.org/resource/8233)

The introduced pathogen *Cronartium ribicola*, cause of white pine blister rust, has spread across much of western North America and established known infestations within all but one species of white pine endemic to western Canada and the United States. Blister rust damage to severely diseased trees reduces reproduction and survival...

Author(s): John W. Schwandt, I. Blakley Lockman, John T. Kliejunas, J. A. Muir

Year Published: 2010

Type: Document

Book or Chapter or Journal Article, Synthesis

### **Polygonum aviculare (prostrate knotweed)**

[www.nrfirescience.org/resource/10471](http://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

### **Fuel treatment guidebook: illustrating treatment effects on fire hazard**

[www.nrfirescience.org/resource/8155](http://www.nrfirescience.org/resource/8155)

The Guide to Fuel Treatments (Johnson and others 2007) analyzes potential fuel treatments and the potential effects of those treatments for dry forest lands in the Western United States. The guide examines low- to mid-elevation dry forest stands with high stem densities and heavy ladder fuels, which are currently common due to fire...

Author(s): Crystal L. Raymond

Year Published: 2009

Type: Document

Book or Chapter or Journal Article

### **Equations to convert compacted crown ratio to uncompacted crown ratio for trees in the Interior West**

[www.nrfirescience.org/resource/8368](http://www.nrfirescience.org/resource/8368)

Crown ratio is the proportion of total tree length supporting live foliage. Inventory programs of the US Forest Service generally define crown ratio in terms of compacted or uncompacted measurements. Measurement of compacted crown ratio (CCR) involves envisioning the transfer of lower branches of trees with asymmetric crowns to fill...

Author(s): Chris Toney, Matthew C. Reeves

Year Published: 2009

Type: Document

Book or Chapter or Journal Article

## **Effects of timber harvest following wildfire in western North America**

[www.nrfirescience.org/resource/11122](http://www.nrfirescience.org/resource/11122)

Timber harvest following wildfire leads to different outcomes depending on the biophysical setting of the forest, pattern of burn severity, operational aspects of tree removal, and other management activities. Fire effects range from relatively minor, in which fire burns through the understory and may kill a few trees, to severe, in...

Author(s): David L. Peterson, James K. Agee, Gregory H. Aplet, Dennis P. Dykstra, Russell T. Graham, John F. Lehmkuhl, David S. Pilliod, Donald F. Potts, Robert F. Powers, John D. Stuart

Year Published: 2009

Type: Document

Technical Report or White Paper

## **Artemisia nova (black sagebrush)**

[www.nrfirescience.org/resource/10650](http://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

## **Tanacetum vulgare (common tansy)**

[www.nrfirescience.org/resource/10453](http://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

## **Isatis tinctoria (dyer's woad)**

[www.nrfirescience.org/resource/10498](http://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

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

[www.nrfirescience.org/resource/11107](http://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

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

[www.nrfirescience.org/resource/11023](http://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

### **Nucifraga columbiana (Clark's nutcracker)**

[www.nrfirescience.org/resource/10782](http://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

### **Climate change impacts on northwestern and intermountain United States rangelands**

[www.nrfirescience.org/resource/8327](http://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

### **Big changes in the Great Basin**

[www.nrfirescience.org/resource/12131](http://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

### **Zuckia brandegeei (siltbush)**

[www.nrfirescience.org/resource/10667](http://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

### **Sanguisorba minor (small burnet)**

[www.nrfirescience.org/resource/10656](http://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

### **Potentilla glandulosa (sticky cinquefoil)**

[www.nrfirescience.org/resource/10822](http://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

### **Carex rossii (Ross's sedge)**

[www.nrfirescience.org/resource/10594](http://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

### **Neotoma cinerea (bushy-tailed woodrat)**

[www.nrfirescience.org/resource/10902](http://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

### **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](http://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

### **Sphaeralcea grossulariifolia (gooseberryleaf globemallow)**

[www.nrfirescience.org/resource/10894](http://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

### **Managing forest structure and fire hazard - A tool for planners**

[www.nrfirescience.org/resource/8404](http://www.nrfirescience.org/resource/8404)

Fire planners and other resource managers need to examine a range of potential fuel and vegetation treatments to select options that will lead to desired outcomes for fire hazard and natural resource conditions. A new approach to this issue integrates concepts and tools from silviculture and fuel science to quantify outcomes for a...

Author(s): Morris C. Johnson, David L. Peterson, Crystal L. Raymond

Year Published: 2007

Type: Document

Book or Chapter or Journal Article

### **Linum lewisii (Lewis flax)**

[www.nrfirescience.org/resource/10815](http://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

### **Poa bulbosa (bulbous bluegrass)**

[www.nrfirescience.org/resource/10682](http://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

### **Arctostaphylos patula (greenleaf manzanita)**

[www.nrfirescience.org/resource/10705](http://www.nrfirescience.org/resource/10705)

This FEIS species review synthesizes information on the relationship of *Arctostaphylos patula* (greenleaf manzanita) 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: 2007

Type: Document

Synthesis

### **Guide to fuel treatments in dry forests of the Western United States: assessing forest structure and fire hazard**

[www.nrfirescience.org/resource/11166](http://www.nrfirescience.org/resource/11166)

Guide to Fuel Treatments analyzes a range of fuel treatments for representative dry forest stands in the Western United States with overstories dominated by ponderosa pine (*Pinus ponderosa*), Douglas-fir (*Pseudotsuga menziesii*), and pinyon pine (*Pinus edulis*). Six silvicultural options (no thinning; thinning from below to 50 trees...

Author(s): Morris C. Johnson, David L. Peterson, Crystal L. Raymond

Year Published: 2007

Type: Document

Technical Report or White Paper

### **Artemisia campestris (field sagewort)**

[www.nrfirescience.org/resource/10675](http://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

### **Juniperus horizontalis (creeping juniper)**

[www.nrfirescience.org/resource/10671](http://www.nrfirescience.org/resource/10671)

This FEIS species review synthesizes information on the relationship of *Juniperus horizontalis* (creeping 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): Corey L. Gucker

Year Published: 2006



Type: Document  
Synthesis

### **Modeling fuel treatment costs on Forest Service lands in the western United States**

[www.nrfirescience.org/resource/7915](http://www.nrfirescience.org/resource/7915)

This report intends to increase the accuracy of cost data available for planning and prioritizing fuel management in national forests. A survey of fire management officers was used to develop regression models that may be used to estimate the cost of hazardous fuel reduction treatments. The model was based on the USDA Forest Service...

Author(s): David E. Calkin, Krista M. Gebert

Year Published: 2006

Type: Document

Book or Chapter or Journal Article, Synthesis

### **Zigadenus venenosus (meadow deathcamas)**

[www.nrfirescience.org/resource/10704](http://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

### **Calamagrostis montanensis (plains reedgrass)**

[www.nrfirescience.org/resource/10702](http://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

### **Sphaeralcea coccinea (scarlet globemallow)**

[www.nrfirescience.org/resource/10892](http://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

### **Rosa woodsii (Wood's rose)**

[www.nrfirescience.org/resource/10700](http://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

### **Distichlis spicata (saltgrass)**

[www.nrfirescience.org/resource/10695](http://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

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

[www.nrfirescience.org/resource/11409](http://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

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

[www.nrfirescience.org/resource/10709](http://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

### **Geum triflorum (prairie smoke)**

[www.nrfirescience.org/resource/10801](http://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

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

[www.nrfirescience.org/resource/10904](http://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

### **Cercocarpus montanus (true mountain-mahogany)**

[www.nrfirescience.org/resource/10673](http://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

### **Patagioenas fasciata (band-tailed pigeon)**

[www.nrfirescience.org/resource/10896](http://www.nrfirescience.org/resource/10896)

This FEIS species review synthesizes information on the relationship of *Patagioenas fasciata* (band-tailed pigeon) 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): Elena D. Ulev

Year Published: 2006

Type: Document

Synthesis

### **Ecological science relevant to management policies for fire-prone forests of the western United States, Society for Conservation Biology scientific panel of fire in western U.S. forests**

[www.nrfirescience.org/resource/11190](http://www.nrfirescience.org/resource/11190)

Fire is a primary natural disturbance in most forests of western North America and has shaped their plant and animal communities for millions of years. Native species and fundamental ecological processes are dependent on conditions created by fire. However, many western forests have experienced shifts in wildfire regimes and forest...

Author(s): Reed F. Noss, Jerry F. Franklin, William L. Baker, Tania L. Schoennagel, Peter B. Moyle

Year Published: 2006

Type: Document

Technical Report or White Paper

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

[www.nrfirescience.org/resource/10893](http://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

### ***Vulpia myuros* (rattail sixweeks grass)**

[www.nrfirescience.org/resource/10460](http://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

### ***Rosa arkansana* (prairie rose)**

[www.nrfirescience.org/resource/10699](http://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

### ***Carex filifolia* (threadleaf sedge)**

[www.nrfirescience.org/resource/10696](http://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

### ***Vulpia octoflora* (sixweeks grass)**

[www.nrfirescience.org/resource/10710](http://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

### **Balsamorhiza hookeri (Hooker balsamroot)**

[www.nrfirescience.org/resource/10804](http://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

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

[www.nrfirescience.org/resource/10678](http://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

### **Piranga ludoviciana (western tanager)**

[www.nrfirescience.org/resource/10795](http://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

### **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](http://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

### **Artemisia dracunculus (tarragon)**

[www.nrfirescience.org/resource/10665](http://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

### **Elaeagnus angustifolia (Russian-olive)**

[www.nrfirescience.org/resource/10486](http://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

### **Forest structure and fire hazard in dry forests of the Western United States**

[www.nrfirescience.org/resource/11163](http://www.nrfirescience.org/resource/11163)

ANNOTATION: This document synthesizes the relevant scientific knowledge that can assist fuel-treatment projects on national forests and other public lands and contribute to National Environmental Policy Act (NEPA) analyses and other assessments. It is intended to support science-based decision making for fuel management in dry...

Author(s): David L. Peterson, Morris C. Johnson, James K. Agee, Theresa B. Jain, Donald McKenzie, Elizabeth D. Reinhardt

Year Published: 2005

Type: Document

Synthesis, Technical Report or White Paper

### **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](http://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

Technical Report or White Paper

### **Calamovilfa longifolia (prairie sandreed)**

[www.nrfirescience.org/resource/10697](http://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

### **Hypericum perforatum (common St Johnswort)**

[www.nrfirescience.org/resource/10499](http://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

### **Leucopoa kingii (spike fescue)**

[www.nrfirescience.org/resource/10599](http://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

### **Galium aparine (stickywilly)**

[www.nrfirescience.org/resource/10677](http://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

### **Testing transferability of willingness to pay for forest fire prevention among three states of California, Florida, and Montana**

[www.nrfirescience.org/resource/7960](http://www.nrfirescience.org/resource/7960)

The equivalency of willingness to pay between the states of California, Florida and Montana is tested. Residents in California, Florida and Montana have an average willingness to pay of \$417, \$305, and \$382 for prescribed burning program, and \$403, \$230, and \$208 for mechanical fire fuel reduction program, respectively. Due to wide...

Author(s): John B. Loomis, Le Trong Hung, Armando Gonzalez-Caban  
Year Published: 2005  
Type: Document  
Book or Chapter or Journal Article

### **Symphoricarpos longiflorus (longflower snowberry)**

[www.nrfirescience.org/resource/10790](http://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

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

[www.nrfirescience.org/resource/11039](http://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

### **Bouteloua barbata (sixweeks grama)**

[www.nrfirescience.org/resource/10703](http://www.nrfirescience.org/resource/10703)

This FEIS species review synthesizes information on the relationship of *Bouteloua barbata* (sixweeks 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,...

Author(s): Alan S. Hauser

Year Published: 2005

Type: Document

Synthesis

### **Yucca glauca (soapweed yucca)**

[www.nrfirescience.org/resource/10664](http://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

### **Sage-grouse habitat restoration symposium proceedings**

[www.nrfirescience.org/resource/11007](http://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

**Juncus balticus (Baltic rush)**

[www.nrfirescience.org/resource/10701](http://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

**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](http://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

**Artemisia ludoviciana (prairie sage)**

[www.nrfirescience.org/resource/10605](http://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

**Opuntia fragilis (brittle pricklypear)**

[www.nrfirescience.org/resource/10867](http://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

### **Psathyrostachys juncea (Russian wildrye)**

[www.nrfirescience.org/resource/10476](http://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

### **Variation in fire regimes of the Rocky Mountains: implications for avian communities and fire management**

[www.nrfirescience.org/resource/8144](http://www.nrfirescience.org/resource/8144)

Information about avian responses to fire in the U.S. Rocky Mountains is based solely on studies of crown fires. However, fire management in this region is based primarily on studies of low-elevation ponderosa pine (*Pinus ponderosa*) forests maintained largely by frequent understory fires. In contrast to both of these trends, most...

Author(s): Victoria A. Saab, Hugh D. W. Powell, Natasha B. Kotliar, Karen R. Newlon

Year Published: 2005

Type: Document

Book or Chapter or Journal Article, Synthesis

### **Sarcobatus vermiculatus (black greasewood)**

[www.nrfirescience.org/resource/10592](http://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

### **Chondrilla juncea (rush skeletonweed)**

[www.nrfirescience.org/resource/10483](http://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

### **Global warming's unlikely harbingers**

[www.nrfirescience.org/resource/11497](http://www.nrfirescience.org/resource/11497)

The lodgepole pines are dying. Inside the bark of the trees, tens of millions of beetles are tunneling, birthing, hatching, maturing. In early May, when Forest Service researcher Jesse Logan drives through the Stanley Valley to inspect the damage, more than half the lodgepole pines display dull red foliage -

the signal flag of...

Author(s): Michelle Nijhuis

Year Published: 2004

Type: Document

Book or Chapter or Journal Article

### **Guidelines for restoration and rehabilitation of principal plant communities**

[www.nrfirescience.org/resource/11121](http://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

### **Leymus salinus (Salina wildrye)**

[www.nrfirescience.org/resource/10602](http://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

### **Basic considerations for range and wildlife revegetation and restoration**

[www.nrfirescience.org/resource/11118](http://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

### **Rhus trilobata (skunkbush sumac)**

[www.nrfirescience.org/resource/10596](http://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

**Sonchus arvensis (perennial sowthistle)**

[www.nrfirescience.org/resource/10464](http://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

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

[www.nrfirescience.org/resource/10490](http://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

**Convolvulus arvensis (field bindweed)**

[www.nrfirescience.org/resource/10487](http://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

**Lewis's Woodpecker (*Melanerpes lewis*): a technical conservation assessment**

[www.nrfirescience.org/resource/11498](http://www.nrfirescience.org/resource/11498)

Lewis's woodpecker (*Melanerpes lewis*) is a locally common but patchily distributed woodpecker species usually seen in open forests of western North America. The combination of its sporadic distribution, its diet of adult-stage free-living insects (primarily aerial), its preference to nest in burned landscapes, and its variable...

Author(s): Stephen C. Abele, Victoria A. Saab, Edward O. Garton

Year Published: 2004

Type: Document

Technical Report or White Paper

**Forbs for seeding range and wildlife habitats**

[www.nrfirescience.org/resource/11120](http://www.nrfirescience.org/resource/11120)

Description not entered

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

Year Published: 2004

Type: Document

**Picrothamnus desertorum (budsage)**

[www.nrfirescience.org/resource/10791](http://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

**Descurainia sophia (flixweed tansymustard)**

[www.nrfirescience.org/resource/10463](http://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

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

[www.nrfirescience.org/resource/10489](http://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

**Pinus ponderosa var. scopulorum (interior ponderosa pine)**

[www.nrfirescience.org/resource/10718](http://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

**Sisymbrium altissimum (tumble mustard)**

[www.nrfirescience.org/resource/10458](http://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

### **Bouteloua gracilis (blue grama)**

[www.nrfirescience.org/resource/10604](http://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](http://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

### **Potentilla recta (sulfur cinquefoil)**

[www.nrfirescience.org/resource/10497](http://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](http://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

**Atriplex canescens (fourwing saltbush)**

[www.nrfirescience.org/resource/10727](http://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

**Artemisia frigida (fringed sagebrush)**

[www.nrfirescience.org/resource/10788](http://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

**Comparing two methods of identifying ecological restoration opportunities**

[www.nrfirescience.org/resource/8430](http://www.nrfirescience.org/resource/8430)

Two methods for identifying ecological restoration opportunities in the Northern Region of the Forest Service are compared. Different analysis methods are often used to address issues at different planning scales. The first method is a nonspatial characterization of current vegetation conditions using Forest Inventory and Analysis (...)

Author(s): Jimmie D. Chew

Year Published: 2003

Type: Document

Conference Proceedings

**Descurainia pinnata (pinnate tansymustard)**

[www.nrfirescience.org/resource/10723](http://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

**Artemisia rigida (stiff sagebrush)**

[www.nrfirescience.org/resource/10785](http://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

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

[www.nrfirescience.org/resource/11490](http://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

### ***Carduus nutans* (musk thistle)**

[www.nrfirescience.org/resource/10494](http://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

### ***Cirsium vulgare* (bull thistle)**

[www.nrfirescience.org/resource/10492](http://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

### ***Balsamorhiza sagittata* (arrowleaf balsamroot)**

[www.nrfirescience.org/resource/10789](http://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



## **Cascading effects of fire exclusion in Rocky Mountain ecosystems: a literature review**

[www.nrfirescience.org/resource/11187](http://www.nrfirescience.org/resource/11187)

The health of many Rocky Mountain ecosystems is in decline because of the policy of excluding fire in the management of these ecosystems. Fire exclusion has actually made it more difficult to fight fires, and this poses greater risks to the people who fight fires and for those who live in and around Rocky Mountain forests and...

Author(s): Robert E. Keane, Kevin C. Ryan, Thomas T. Veblen, Craig D. Allen, Jesse A. Logan, Brad C. Hawkes

Year Published: 2002

Type: Document

Synthesis, Technical Report or White Paper

## **Juniperus scopulorum (Rocky Mountain juniper)**

[www.nrfirescience.org/resource/10827](http://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

## **Artemisia arbuscula (low sagebrush)**

[www.nrfirescience.org/resource/10854](http://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

## **Tetradymia spinosa (spiny horsebrush)**

[www.nrfirescience.org/resource/10733](http://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

## **Lythrum salicaria (purple loosestrife)**

[www.nrfirescience.org/resource/10467](http://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

**Elymus lanceolatus (thickspike wheatgrass)**

[www.nrfirescience.org/resource/10825](http://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

**Centaurea solstitialis (yellow starthistle)**

[www.nrfirescience.org/resource/10484](http://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

**Cynoglossum officinale (houndstongue)**

[www.nrfirescience.org/resource/10500](http://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

**Leymus cinereus (basin wildrye)**

[www.nrfirescience.org/resource/10601](http://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

**Tetradymia glabrata (littleleaf horsebrush)**

[www.nrfirescience.org/resource/10735](http://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

### **Schizachyrium scoparium (little bluestem)**

[www.nrfirescience.org/resource/10852](http://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

### **Pinus edulis (Colorado pinyon)**

[www.nrfirescience.org/resource/10598](http://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

### **Taeniatherum caput-medusae (medusahead)**

[www.nrfirescience.org/resource/10447](http://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

### **Elymus elymoides (bottlebrush squirreltail)**

[www.nrfirescience.org/resource/10834](http://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

**Dasiphora floribunda (shrubby cinquefoil)**

[www.nrfirescience.org/resource/10608](http://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

**Tetradymia canescens (gray horsebrush)**

[www.nrfirescience.org/resource/10824](http://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

**Pinus flexilis (limber pine)**

[www.nrfirescience.org/resource/10741](http://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

**Abies concolor (white fir)**

[www.nrfirescience.org/resource/10936](http://www.nrfirescience.org/resource/10936)

This FEIS species review synthesizes information on the relationship of *Abies concolor* (white 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, distribution, basic biology, and...

Author(s): Kristin L. Zouhar

Year Published: 2001

Type: Document

Synthesis

**Centaurea diffusa (diffuse knapweed)**

[www.nrfirescience.org/resource/10481](http://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

### **Ceanothus velutinus (snowbrush ceanothus)**

[www.nrfirescience.org/resource/10593](http://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

### **Centaurea maculosa (spotted knapweed)**

[www.nrfirescience.org/resource/10493](http://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 angustifolia (narrowleaf cottonwood)**

[www.nrfirescience.org/resource/10829](http://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

### **Acer glabrum (Rocky Mountain maple)**

[www.nrfirescience.org/resource/10609](http://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

**Cirsium arvense (Canada thistle)**

[www.nrfirescience.org/resource/10482](http://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

**Ephedra viridis (green ephedra)**

[www.nrfirescience.org/resource/10603](http://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

**Pinus monophylla (singleleaf pinyon)**

[www.nrfirescience.org/resource/10935](http://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

**Acroptilon repens (Russian knapweed)**

[www.nrfirescience.org/resource/10496](http://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

**Koeleria macrantha (prairie Junegrass)**

[www.nrfirescience.org/resource/10830](http://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

### **Fallugia paradoxa (Apache plume)**

[www.nrfirescience.org/resource/10786](http://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

### **Achnatherum thurberiana (Thurber needlegrass)**

[www.nrfirescience.org/resource/10610](http://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

### **Achnatherum nelsonii (Columbia needlegrass)**

[www.nrfirescience.org/resource/10938](http://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

### **Prunus virginiana (chokecherry)**

[www.nrfirescience.org/resource/10503](http://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

### **Achnatherum lettermanii (Letterman's needlegrass)**

[www.nrfirescience.org/resource/10866](http://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](http://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

### **Pleuraphis jamesii (galleta)**

[www.nrfirescience.org/resource/10833](http://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

### **Danthonia unispicata (onespike oatgrass)**

[www.nrfirescience.org/resource/10754](http://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

### **Fire, competition, and forest pests: landscape treatment to sustain ecosystem function**

[www.nrfirescience.org/resource/10988](http://www.nrfirescience.org/resource/10988)

Fire, competition for light and water, and native forest pests have interacted for millennia in western forests to produce a countryside dominated by seral species of conifers. These conifer-dominated ecosystems exist in six kinds of biotic communities. We divided one of these communities, the Rocky Mountain Montane Conifer Forest,...

Author(s): GERAL I. McDONALD, ALAN E. HARVEY, JONALEA R. TONN



Year Published: 2000  
Type: Document  
Conference Proceedings

### **Symphoricarpos albus (common snowberry)**

[www.nrfirescience.org/resource/10783](http://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

### **Festuca idahoensis (Idaho fescue)**

[www.nrfirescience.org/resource/10937](http://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

### **Fire in western shrubland, woodland, and grassland ecosystems**

[www.nrfirescience.org/resource/11116](http://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

### **Amelanchier utahensis (Utah serviceberry)**

[www.nrfirescience.org/resource/10588](http://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

### **Distribution, composition, and classification of current juniper-pinyon woodlands and savannas**

### **across western North America**

[www.nrfirescience.org/resource/11886](http://www.nrfirescience.org/resource/11886)

Pinyon-juniper woodlands involve vegetation dominated by about seven species of Pinus and 17 species of Juniperus scattered over more than 75 million acres of the Southwestern United States and Mexico. The junipers are more widespread latitudinally, longitudinally, and elevationally than the pinyons. The understory is much more...

Author(s): Neil E. West

Year Published: 1999

Type: Document

Conference Proceedings

### **Juniperus osteosperma (Utah juniper)**

[www.nrfirescience.org/resource/10586](http://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

### **Use of the helitorch to enhance diversity on riparian corridors in mature pinyon-juniper communities: a conceptual approach**

[www.nrfirescience.org/resource/12109](http://www.nrfirescience.org/resource/12109)

As pinyon-juniper have increased their dominance throughout the Great Basin, other perennial plants have declined in abundance. Riparian areas traditionally have the greatest biodiversity found in the region. The increase of pinyon-juniper can generally be attributed to a change in the disturbance regime. To increase the plant...

Author(s): G. Allen Rasmussen, Robin J. Tausch, Stephen C. Bunting

Year Published: 1999

Type: Document

Conference Proceedings

### **Chrysothamnus viscidiflorus (green rabbitbrush)**

[www.nrfirescience.org/resource/10884](http://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

### **Proceedings: ecology and management of pinyon-juniper communities within the Interior West; September 15-18, 1997; Provo, UT**

[www.nrfirescience.org/resource/11884](http://www.nrfirescience.org/resource/11884)

A symposium held September 15-18, 1997, in Provo, UT, and Sanpete County, UT, provided information on the ecology, management, resource values, and restoration of pinyon-juniper communities in the Interior Western United States. The conference was hosted by the USDA Forest

Service, Rocky Mountain Research Station and the Utah...  
Author(s): Stephen B. Monsen, Richard Stevens  
Year Published: 1999  
Type: Document  
Conference Proceedings

### **Purshia tridentata (antelope bitterbrush)**

[www.nrfirescience.org/resource/10584](http://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

### **Transitions and thresholds: influences and implications for management in pinyon and juniper woodlands**

[www.nrfirescience.org/resource/12107](http://www.nrfirescience.org/resource/12107)

Thresholds are important to understanding Great Basin ecology. Once a threshold has been crossed, the new community may have very different functional capabilities than the previous community. Management action needs to occur well before a threshold is crossed to be effective, and that action needs to reflect the scales of time and...

Author(s): Robin J. Tausch  
Year Published: 1999  
Type: Document  
Conference Proceedings

### **Juniperus occidentalis (western juniper)**

[www.nrfirescience.org/resource/10878](http://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

### **Historic pinyon and juniper woodland development**

[www.nrfirescience.org/resource/12105](http://www.nrfirescience.org/resource/12105)

Climate change influences the ecological processes driving regional vegetation change. With the paleoecological and geomorphological perspective of Holocene history, it is apparent that each vegetation change interacting with the environment sets the conditions for the next vegetation change. Because of interactions between...

Author(s): Robin J. Tausch  
Year Published: 1999  
Type: Document  
Conference Proceedings

**Muhlenbergia richardsonis (mat muhly)**

[www.nrfirescience.org/resource/10589](http://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

**Hesperostipa comata (needle-and-thread grass)**

[www.nrfirescience.org/resource/10587](http://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

**Artemisia tridentata subsp. tridentata (basin big sagebrush)**

[www.nrfirescience.org/resource/10886](http://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

**Ecology and management of pinyon-juniper communities within the Interior West: Overview of the "Ecological Session" of the Symposium**

[www.nrfirescience.org/resource/11885](http://www.nrfirescience.org/resource/11885)

Categories of papers in the "Ecological Session" were history and ecological change, distribution, classification, ecology, and physiology, succession and diversity, and disease. Substantial changes have taken place in pinyon-juniper woodlands over the past 150 years. Coinciding with and following early extensive localized...

Author(s): W. A. Laycock

Year Published: 1999

Type: Document

Conference Proceedings

**Pseudoroegneria spicata (bluebunch wheatgrass)**

[www.nrfirescience.org/resource/10585](http://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

### **The budgetary, ecological, and managerial impacts of pinyon-juniper and cheatgrass fires**

[www.nrfirescience.org/resource/12108](http://www.nrfirescience.org/resource/12108)

The 1996 fire season illustrated the potential impacts of wildland fires on the Bureau of Land Management (BLM) administered lands through numerous western states. During the 1996 fire season, over six million acres burned in the United States through unplanned ignitions (wildfires). Over two million acres burned on BLM administered...

Author(s): Thomas C. Roberts

Year Published: 1999

Type: Document

Conference Proceedings

### **Danthonia intermedia (timber oatgrass)**

[www.nrfirescience.org/resource/10882](http://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

### **Bouteloua hirsuta (hairy grama)**

[www.nrfirescience.org/resource/10583](http://www.nrfirescience.org/resource/10583)

This FEIS species review synthesizes information on the relationship of *Bouteloua hirsuta* (hairy grama) 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): Elena Zlatnik

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](http://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

**Artemisia tridentata subsp. wyomingensis (Wyoming big sagebrush)**

[www.nrfirescience.org/resource/10738](http://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

**Bromus hordeaceus (soft chess)**

[www.nrfirescience.org/resource/10461](http://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

**Aristida purpurea (purple threeawn)**

[www.nrfirescience.org/resource/10728](http://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 secunda (Sandberg bluegrass)**

[www.nrfirescience.org/resource/10716](http://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

**Amelanchier alnifolia (Saskatoon serviceberry)**

[www.nrfirescience.org/resource/10730](http://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

### **Poa fendleriana (Fendler bluegrass)**

[www.nrfirescience.org/resource/10708](http://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](http://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

### **Mustela vison (American mink)**

[www.nrfirescience.org/resource/10513](http://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

### **Athene cunicularia (burrowing owl)**

[www.nrfirescience.org/resource/10726](http://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

### **Taxidea taxus (American badger)**

[www.nrfirescience.org/resource/10507](http://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

### **Urocyon cinereoargenteus (common gray fox)**

[www.nrfirescience.org/resource/10506](http://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

### **Populus tremuloides (quaking aspen)**

[www.nrfirescience.org/resource/10717](http://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

### **Scophiopus intermontanus (Great Basin spadefoot)**

[www.nrfirescience.org/resource/10713](http://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

### **Molothrus ater (brown-headed cowbird)**

[www.nrfirescience.org/resource/10444](http://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

**Sialia currucoides (mountain bluebird)**

[www.nrfirescience.org/resource/10510](http://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

**Ribes cereum (wax currant)**

[www.nrfirescience.org/resource/10753](http://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

**Puma concolor (mountain lion)**

[www.nrfirescience.org/resource/10534](http://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

**Ribes aureum (golden currant)**

[www.nrfirescience.org/resource/10749](http://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

**Sialia mexicana (western bluebird)**

[www.nrfirescience.org/resource/10505](http://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

### **Festuca rubra (red fescue)**

[www.nrfirescience.org/resource/10923](http://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

### **Schedonorus arundinaceus (tall fescue)**

[www.nrfirescience.org/resource/10479](http://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

### **Bos bison (American bison)**

[www.nrfirescience.org/resource/10549](http://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

### **Bubo virginianus (great horned owl)**

[www.nrfirescience.org/resource/10518](http://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

**Peromyscus maniculatus (deer mouse)**

[www.nrfirescience.org/resource/10512](http://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

**Sylvilagus floridanus (eastern cottontail)**

[www.nrfirescience.org/resource/10508](http://www.nrfirescience.org/resource/10508)

This FEIS species review synthesizes information on the relationship of *Sylvilagus floridanus* (eastern cottontail) 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: 1995

Type: Document

Synthesis

**Phasianus colchicus (ring-necked pheasant)**

[www.nrfirescience.org/resource/10535](http://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

**Lepus californicus (black-tailed jackrabbit)**

[www.nrfirescience.org/resource/10721](http://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

**Ribes velutinum (desert gooseberry)**

[www.nrfirescience.org/resource/10750](http://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

### **Procyon lotor (northern raccoon)**

[www.nrfirescience.org/resource/10533](http://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

### **Dipodomys ordii (Ord's kangaroo rat)**

[www.nrfirescience.org/resource/10504](http://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

### **Lynx rufus (bobcat)**

[www.nrfirescience.org/resource/10526](http://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

### **Prunus emarginata (bitter cherry)**

[www.nrfirescience.org/resource/10635](http://www.nrfirescience.org/resource/10635)

This FEIS species review synthesizes information on the relationship of *Prunus emarginata* (bitter cherry) 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: 1995

Type: Document

Synthesis

**Canis latrans (coyote)**

[www.nrfirescience.org/resource/10548](http://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

**Dichanthelium acuminatum (woolly panicum)**

[www.nrfirescience.org/resource/10914](http://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

**Antilocapra americana (pronghorn)**

[www.nrfirescience.org/resource/10731](http://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

**Buteo lagopus (rough-legged hawk)**

[www.nrfirescience.org/resource/10517](http://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

**Buteo regalis (ferruginous hawk)**

[www.nrfirescience.org/resource/10545](http://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

**Falco mexicanus (prairie falcon)**

[www.nrfirescience.org/resource/10541](http://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

**Aquila chrysaetos (golden eagle)**

[www.nrfirescience.org/resource/10554](http://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

**Solidago missouriensis (prairie goldenrod)**

[www.nrfirescience.org/resource/10917](http://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

**Chamaebatiaria millefolium (desert sweet)**

[www.nrfirescience.org/resource/10765](http://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

**Buteo swainsoni (Swainson's hawk)**

[www.nrfirescience.org/resource/10546](http://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

### **Dumetella carolinensis (gray catbird)**

[www.nrfirescience.org/resource/10516](http://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

### **Falco sparverius (American kestrel)**

[www.nrfirescience.org/resource/10542](http://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

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

[www.nrfirescience.org/resource/12046](http://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

### **Alectoris chukar (chukar)**

[www.nrfirescience.org/resource/10860](http://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

### **Agrostis exarata (spike bentgrass)**

[www.nrfirescience.org/resource/10641](http://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

### **Buteo jamaicensis (red-tailed hawk)**

[www.nrfirescience.org/resource/10551](http://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

### **Accipiter striatus (sharp-shinned hawk)**

[www.nrfirescience.org/resource/10519](http://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

### **Dracocephalum parviflorum (American dragonhead)**

[www.nrfirescience.org/resource/10761](http://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

### **Trifolium repens (white clover)**

[www.nrfirescience.org/resource/10617](http://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

### **Tortula ruralis (twisted moss)**

[www.nrfirescience.org/resource/10756](http://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

### **Ovis canadensis (bighorn sheep)**

[www.nrfirescience.org/resource/10536](http://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

### **Zenaida macroura (mourning dove)**

[www.nrfirescience.org/resource/10531](http://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

### **Lupinus caudatus (tailcup lupine)**

[www.nrfirescience.org/resource/10775](http://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

**Lewisia rediviva (bitterroot)**

[www.nrfirescience.org/resource/10736](http://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

**Oxytropis sericea (whitepoint locoweed)**

[www.nrfirescience.org/resource/10643](http://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

**Rosa nutkana (Nootka rose)**

[www.nrfirescience.org/resource/10813](http://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

**Wyethia amplexicaulis (mules-ears)**

[www.nrfirescience.org/resource/10771](http://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

**Haliaeetus leucocephalus (bald eagle)**

[www.nrfirescience.org/resource/10843](http://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

**Zigadenus paniculatus (foothill deathcamas)**

[www.nrfirescience.org/resource/10707](http://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

**Taraxacum officinale (common dandelion)**

[www.nrfirescience.org/resource/10448](http://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

**Claytonia perfoliata (miner's-lettuce)**

[www.nrfirescience.org/resource/10763](http://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

**Solidago canadensis (Canada goldenrod)**

[www.nrfirescience.org/resource/10618](http://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 pratensis (Kentucky bluegrass)**

[www.nrfirescience.org/resource/10446](http://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

### **Marchantia polymorpha (liverwort)**

[www.nrfirescience.org/resource/10757](http://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

### **Vicia americana (American vetch)**

[www.nrfirescience.org/resource/10616](http://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

### **Delphinium bicolor (low larkspur)**

[www.nrfirescience.org/resource/10778](http://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

### **Rosa gymnocarpa (baldhip rose)**

[www.nrfirescience.org/resource/10814](http://www.nrfirescience.org/resource/10814)

This FEIS species review synthesizes information on the relationship of *Rosa gymnocarpa* (baldhip 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...

Author(s): William R. Reed

Year Published: 1993

Type: Document  
Synthesis

### **Amaranthus retroflexus (rough pigweed)**

[www.nrfirescience.org/resource/10480](http://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

### **Lupinus sericeus (silky lupine)**

[www.nrfirescience.org/resource/10774](http://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

### **Liatris punctata (blazing star)**

[www.nrfirescience.org/resource/10920](http://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

### **Antennaria microphylla (rosy pussytoes)**

[www.nrfirescience.org/resource/10768](http://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

### **Phleum pratense (timothy)**

[www.nrfirescience.org/resource/10449](http://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

### **Collema tenax (black lichen)**

[www.nrfirescience.org/resource/10764](http://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

### **Fire ecology of the forest habitat types of eastern Idaho and western Wyoming**

[www.nrfirescience.org/resource/12116](http://www.nrfirescience.org/resource/12116)

This report summarizes the available fire ecology and management information relating to the forest habitat types of eastern Idaho and western Wyoming, west of the crest of the Wind River Mountain.

Author(s): Anne F. Bradley, William C. Fischer, Nonan V. Noste

Year Published: 1992

Type: Document

Technical Report or White Paper

### **Elymus trachycaulus (slender wheatgrass)**

[www.nrfirescience.org/resource/10722](http://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

### **Achnatherum richardsonii (Richardson needlegrass)**

[www.nrfirescience.org/resource/10638](http://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

**Medicago sativa (alfalfa)**

[www.nrfirescience.org/resource/10475](http://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

**Hordeum jubatum (foxtail barley)**

[www.nrfirescience.org/resource/10539](http://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

**Erodium cicutarium (cutleaf filaree)**

[www.nrfirescience.org/resource/10462](http://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

**Maianthemum stellatum (starry Solomon's-seal)**

[www.nrfirescience.org/resource/10686](http://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

**Meleagris gallopavo (wild turkey)**

[www.nrfirescience.org/resource/10841](http://www.nrfirescience.org/resource/10841)

This FEIS species review synthesizes information on the relationship of *Meleagris gallopavo* (wild turkey) 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: 1992

Type: Document

Synthesis

**Arctostaphylos uva-ursi (kinnikinnick)**

[www.nrfirescience.org/resource/10626](http://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 lucida subsp. lasiandra (Pacific willow)**

[www.nrfirescience.org/resource/10577](http://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

**Sambucus nigra subsp. cerulea (blue elderberry)**

[www.nrfirescience.org/resource/10628](http://www.nrfirescience.org/resource/10628)

This FEIS species review synthesizes information on the relationship of *Sambucus nigra* subsp. *cerulea* (blue elderberry) 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): Marilyn F. Crane

Year Published: 1989

Type: Document

Synthesis

**Alnus rhombifolia (white alder)**

[www.nrfirescience.org/resource/10576](http://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

**Use of prescribed burning in juniper and pinyon-juniper woodlands**

[www.nrfirescience.org/resource/12118](http://www.nrfirescience.org/resource/12118)



Postfire succession in juniper and pinyon-juniper is primarily dependent upon the potential of the site, the preburn plant community and the characteristics of the fire. The successful use of prescribed burning is dependent upon the appropriate selection of treatment sites. As juniper and pinyon become more dominant on a site, the...

Author(s): Stephen C. Bunting

Year Published: 1987

Type: Document

Conference Proceedings, Technical Report or White Paper

### **Fire response of shrubs of dry forest habitat types in Montana and Idaho**

[www.nrfirescience.org/resource/11916](http://www.nrfirescience.org/resource/11916)

This paper contains information from diverse sources on the regeneration capabilities, response to fire, and utilization of shrub species important or common to dry forest habitat types in Montana and Idaho. Response to fire is classified by reproductive strategies and how the species persists in the stand.

Utility of the species...

Author(s): Nonan V. Noste, Charles L. Bushey

Year Published: 1987

Type: Document

Technical Report or White Paper

### **Fire ecology of western Montana forest habitat types**

[www.nrfirescience.org/resource/11257](http://www.nrfirescience.org/resource/11257)

Provides information on fire as an ecological factor for forest habitat types in western Montana.

Identifies Fire Groups of habitat types based on fire's role in forest succession. Describes forest fuels and suggests considerations for fire management.

Author(s): William C. Fischer, Anne F. Bradley

Year Published: 1987

Type: Document

Technical Report or White Paper

### **Plant response to fire in the pinyon-juniper zone**

[www.nrfirescience.org/resource/12119](http://www.nrfirescience.org/resource/12119)

The understory base in pinyon-juniper woodlands has been depleted by past abuse and suppression by the tree overstory. Wise use of fire provides a means of reestablishing understory species in the successional cycle. Postfire survival of understory plants depends upon physical placement of the plant in the community as well as the...

Author(s): Richard L. Everett

Year Published: 1987

Type: Document

Conference Proceedings, Synthesis, Technical Report or White Paper

### **Proceedings: Pinyon-Juniper Conference, Reno, NV, January 13-16, 1986**

[www.nrfirescience.org/resource/12117](http://www.nrfirescience.org/resource/12117)

Includes more than 90 papers bringing together research accomplishments of the last 10 years including ongoing research on the ecology and management of pinyon-juniper ecosystems. Scientist and management points of view are presented.

Author(s): Richard L. Everett

Year Published: 1987

Type: Document

Conference Proceedings, Technical Report or White Paper

### **Fire ecology of the forest habitat types of central Idaho**

[www.nrfirescience.org/resource/11258](http://www.nrfirescience.org/resource/11258)

Discusses fire as an ecological factor for forest habitat types occurring in central Idaho. Identifies "Fire Groups" of habitat types based on fire's role in forest succession. Considerations for fire management are suggested.

Author(s): Marilyn F. Crane, William C. Fischer

Year Published: 1986

Type: Document

Technical Report or White Paper

### **Fire ecology of antelope bitterbrush in the Northern Rocky Mountains**

[www.nrfirescience.org/resource/11058](http://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

### **Rangeland fire effects**

[www.nrfirescience.org/resource/11003](http://www.nrfirescience.org/resource/11003)

Description not entered

Author(s): Ken Sanders, Jack Durham

Year Published: 1985

Type: Document

Conference Proceedings

### **Influence of fire on curlleaf mountain-mahogany in the Intermountain West**

[www.nrfirescience.org/resource/11059](http://www.nrfirescience.org/resource/11059)

Comprehensive sampling of curlleaf mountain-mahogany (*Cercocarpus ledifolius*) on 41 sites in five States allowed an assessment of postfire population dynamics, differences in regeneration patterns, and critical events in stand regeneration. Historical accounts of fire, fire history studies, and early photographs provided historical...

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

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](http://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](http://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

### **Fire ecology of Montana forest habitat types east of the Continental Divide**

[www.nrfirescience.org/resource/11261](http://www.nrfirescience.org/resource/11261)

Provides information on fire as an ecological factor for forest habitat types occurring east of the Continental Divide in Montana. Identifies "Fire Groups" of habitat types based on fire's role in forest succession. Describes forest fuels and suggests considerations for fire management.

Author(s): William C. Fischer, Bruce D. Clayton

Year Published: 1983

Type: Document

Synthesis, Technical Report or White Paper

### **Fire ecology and prescribed burning in the Great Plains: a research review**

[www.nrfirescience.org/resource/11912](http://www.nrfirescience.org/resource/11912)

Historical evidence indicates that fires were prevalent in grasslands. In the past, big prairie fires usually occurred during drought years that followed 1 to 3 years of above-average precipitation, which provided abundant and continuous fuel. Fire frequency probably varied from 5 to 10 years in level-to-rolling topography and from...

Author(s): Henry A. Wright, Arthur W. Bailey

Year Published: 1980

Type: Document

Technical Report or White Paper

### **Fire ecology of Lolo National Forest habitat types**

[www.nrfirescience.org/resource/11913](http://www.nrfirescience.org/resource/11913)

This report summarizes available information on fire as an ecological factor for forest habitat types occurring on the Lolo National Forest. The Lolo National Forest habitat types are grouped into 10 Fire Groups based primarily on fire's role in forest succession. For each Fire Group, information is presented on (1) the relationship...

Author(s): Kathleen M. Davis, Bruce D. Clayton, William C. Fischer

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](http://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](http://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.<sup>3</sup>/cm.<sup>2</sup> 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](http://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

### **National forest and rangeland management initiative webinar: rangeland management strategies and tools**

[www.nrfirescience.org/resource/15116](http://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

### **Inter-LCC greater sage-grouse research projects: results and applications to inform landscape-scale management**

[www.nrfirescience.org/resource/14493](http://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

### **Culturally peeled trees handbook**

[www.nrfirescience.org/resource/12391](http://www.nrfirescience.org/resource/12391)

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

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

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

Type: Document

Technical Report or White Paper