

### **Assessing the resistance of a breeding amphibian community to a large wildfire**

[www.nrfirescience.org/resource/20025](http://www.nrfirescience.org/resource/20025)

Socioeconomic and global climate changes are modifying fire regimes towards larger and more intense fires. Studying the response of organisms to the occurrence of large fires is crucial to anticipate shifts in patterns of biodiversity in fire-prone regions. Amphibia is the most threatened terrestrial vertebrate taxon, although it is...

Author(s): Alberto Muñoz, Ángel M. Felicísimo, Xavier Santos

Year Published: 2019

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Book or Chapter or Journal Article

### **Disease in a dynamic landscape: host behavior and wildfire reduce amphibian chytrid infection**

[www.nrfirescience.org/resource/12017](http://www.nrfirescience.org/resource/12017)

Disturbances are often expected to magnify effects of disease, but these effects may depend on the ecology, behavior, and life history of both hosts and pathogens. In many ecosystems, wildfire is the dominant natural disturbance and thus could directly or indirectly affect dynamics of many diseases. To determine how probability of...

Author(s): Blake R. Hossack, Winsor H. Lowe, Joy L. Ware, Paul S. Corn

Year Published: 2013

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Book or Chapter or Journal Article

### **Interactive effects of wildfire, forest management, and isolation on amphibian and parasite abundance**

[www.nrfirescience.org/resource/11970](http://www.nrfirescience.org/resource/11970)

Projected increases in wildfire and other climate-driven disturbances will affect populations and communities worldwide, including host-parasite relationships. Research in temperate forests has shown that wildfire can negatively affect amphibians, but this research has occurred primarily outside of managed landscapes where...

Author(s): Blake R. Hossack, Winsor H. Lowe, R. Ken Honeycutt, Sean A. Parks, Paul S. Corn

Year Published: 2013

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Book or Chapter or Journal Article

### **Rapid increases and time-lagged declines in amphibian occupancy after wildfire**

[www.nrfirescience.org/resource/11998](http://www.nrfirescience.org/resource/11998)

Climate change is expected to increase the frequency and severity of drought and wildfire. Aquatic and moisture-sensitive species, such as amphibians, may be particularly vulnerable to these modified disturbance regimes because large wildfires often occur during extended droughts and thus may compound environmental threats. However...

Author(s): Blake R. Hossack, Winsor H. Lowe, Paul S. Corn

Year Published: 2012

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### **Amphibian responses to wildfire in the western United States: emerging patterns from short-term studies**

[www.nrfirescience.org/resource/8285](http://www.nrfirescience.org/resource/8285)

The increased frequency and severity of large wildfires in the western United States is an important ecological and management issue with direct relevance to amphibian conservation. Although the knowledge of fire effects on amphibians in the region is still limited relative to most other vertebrate

species, we reviewed the current...

Author(s): Blake R. Hossack, David S. Pilliod

Year Published: 2011

Type: Document

Book or Chapter or Journal Article, Synthesis

### **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

### **Thermal characteristics of amphibian microhabitats in a fire-disturbed landscape**

[www.nrfirescience.org/resource/8402](http://www.nrfirescience.org/resource/8402)

Disturbance has long been a central issue in amphibian conservation, often regarding negative effects of logging or other forest management activities, but some amphibians seem to prefer disturbed habitats. After documenting increased use of recently burned forests by boreal toads (*Bufo boreas*), we hypothesized that burned habitats...

Author(s): Blake R. Hossack, Lisa A. Eby, C. Gregory Guscio, Paul S. Corn

Year Published: 2009

Type: Document

Book or Chapter or Journal Article

### **Responses of pond-breeding amphibians to wildfire: short-term patterns in occupancy and colonization**

[www.nrfirescience.org/resource/8249](http://www.nrfirescience.org/resource/8249)

Wildland fires are expected to become more frequent and severe in many ecosystems, potentially posing a threat to many sensitive species. We evaluated the effects of a large, stand-replacement wildfire on three species of pond-breeding amphibians by estimating changes in occupancy of breeding sites during the three years before and...

Author(s): Blake R. Hossack, Paul S. Corn

Year Published: 2007

Type: Document

Book or Chapter or Journal Article

### **Responses of western toads (*Bufo boreas*) to changes in terrestrial habitat resulting from wildfire**

[www.nrfirescience.org/resource/18212](http://www.nrfirescience.org/resource/18212)

Physical disturbances can play a major role in the creation and maintenance of landscape heterogeneity, ecosystem processes, and population and community dynamics. Pickett and White (1985:7) defined disturbance as "any relatively discrete event in time that disrupts ecosystem, community, or population structure and changes..."

Author(s): C. Gregory Guscio

Year Published: 2007

Type: Document

### **Effects of prescribed and wildland fire on aquatic ecosystems in western forests - Final Report to the Joint Fire Science Program**

[www.nrfirescience.org/resource/11161](http://www.nrfirescience.org/resource/11161)

The goal of the project is to understand how fire in upland and riparian forests influence stream communities and whether prescription burning mimics the ecological function of fire in a watershed. The project has two components: wildland fire and prescribed fire. To document the range of biotic and abiotic responses to wildland...

Author(s): David S. Pilliod, R. Bruce Bury, Paul S. Corn

Year Published: 2005

Type: Document

Technical Report or White Paper

### **Fire and amphibians in North America**

[www.nrfirescience.org/resource/16476](http://www.nrfirescience.org/resource/16476)

Information on amphibian responses to fire and fuel reduction practices is critically needed due to potential declines of species and the prevalence of new, more intensive fire management practices in North American forests. The goals of this review are to summarize the known and potential effects of fire and fuels management on...

Author(s): David S. Pilliod, R. Bruce Bury, Erin J. Hyde, Christopher A. Pearl, Paul S. Corn

Year Published: 2003

Type: Document

Book or Chapter or Journal Article

### **Frogs flee from the sound of fire**

[www.nrfirescience.org/resource/18555](http://www.nrfirescience.org/resource/18555)

Fire has an important role in the sensory ecology of many animals. Using acoustic cues to detect approaching fires may give slow-moving animals a head start when fleeing from fires. We report that aestivating juvenile reed frogs (*Hyperolius nitidulus*) respond to playbacks of the sound of fire by fleeing in the direction of...

Author(s): T. Ulmar Grafe, Stefanie Dobler, K. Eduard Linsenmair

Year Published: 2002

Type: Document

Book or Chapter or Journal Article

### **Prescribed fire effects on herpetofauna: review and management implications**

[www.nrfirescience.org/resource/18650](http://www.nrfirescience.org/resource/18650)

Prescribed burning is used to achieve a variety of silvicultural objectives, including controlling heavy fuel accumulation, exposing mineral soil, releasing available nutrients for seedbed preparation, and controlling certain insects, diseases, and competing vegetation (Hunter 1990, Pyne et al. 1996).

Prescribed burning also is an...

Author(s): Kevin R. Russell, David H. Van Lear, David C. Guynn, Jr.

Year Published: 1999

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Book or Chapter or Journal Article

### **Ambystoma macrodactylum (long-toed salamander)**

[www.nrfirescience.org/resource/10732](http://www.nrfirescience.org/resource/10732)

This FEIS species review synthesizes information on the relationship of *Ambystoma macrodactylum*

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

Author(s): Janet L. Howard

Year Published: 1997

Type: Document

Synthesis

### **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

### **Bufo boreas (western toad)**

[www.nrfirescience.org/resource/10859](http://www.nrfirescience.org/resource/10859)

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

Author(s): Janet Sullivan

Year Published: 1994

Type: Document

Synthesis