SUPPORT FRI BY PLACING YOUR AMAZON ORDERS FROM OUR WEB SITE

All FRI's resources are free, but we have no grants or gifts to support our operations. If you would like to help support us, please use the links on our web site for your next Amazon book purchase. Clicking on one of these links immediately connects you with your own Amazon account, but information from your link allows Amazon to track where you came from and give us a cash credit for your purchase. This credit costs you no more than you would spend had you entered through your own Amazon account. There is a link on the home page (see below) that permits you to search for Amazon products, including books of course.

When you do a keyword search, another link appears on the right side of the Search Results page (see below) suggesting books related to your search keyword. This link works in a similar way, crediting us for your purchase.
How to Request Copies of Papers

As you view your search results, you will see a green “Request Document” button on papers that can be requested (see example below). Some papers are copyrighted and cannot be requested directly from us.

Once you are finished scrolling through the results, you can press the “View Document List” button at the top right of the page (see example below).

To obtain copyrighted papers, you may reach the author directly, using the contact information provided in the Notes (see the example below). Authors have permission to send you one copy for research purposes.
Current Titles in Wildland Fire, July, 2014

Reestablishing Whitebark Pine Ecosystems

Author: Keane, R. E.
Source: RMRS Science, August 21, 6 Pages
Date: 2001
Keywords: Management Ecology
Notes: Contact Keane@fs.fed.us
Fire Research Institute, Pdf Number 53743
ARTICLES FOUND IN JUNE, 2014
(SAVE TIME! THE CONTROL-F KEY WILL ALLOW YOU TO SEARCH FOR A TERM YOU ARE INTERESTED IN)

Author(s): Aguas, Ana, Antonio Ferreira, Paula Maia, Paulo M. Fernandes, Luis Roxo, Jan Keizer, Joaquim S. Silva, Francisco C. Rego, Francisco Moreira
Title: Natural establishment of Eucalyptus globulus Labill. in burnt stands in Portugal
Source: Forest Ecology and Management 323: 47-56
Year: 2014
Keywords: ecology portugal
Abstract: Exotic tree species are increasingly common in many regions of the world and at least some species are becoming naturalized in the regions where they were introduced. Disturbances like fire may be at the origin or accelerate the naturalization of these species. Portugal holds one of the largest areas of exotic Eucalyptus globulus plantations in the world and is one of the countries...
Contact: ana.aguas@ipleiria.pt

Author(s): Ajayi, A. S. and J. O. Aruleba
Title: The Effect Of Mulch Burning and Tillage Methods On Some Soil Physical Properties And Yield Of Maize (Zea Mays, L) On A Nigeria Savanna Alfisol
Source: Webcrawler Journal of Agriculture and Food Science 3(3): 16-23
Year: 2014
Keywords: soils
Abstract: ... To maintain and improve soil physical properties NT is recommended but the practice of NT in the zone requires the control of bush fire that burns plant residue mulch.
Keywords: Mulch burning, Tillage, Soil physical properties, Maize yield and Savanna Alfisol.
INTRODUCTION...
Contact: arulebaunad@yahoo.com
FRI Access Number: 96888

Author(s): Albertson, Kevin, Jonathan Aylen, Gina Cavan, Julia McMorrow
Title: Climate change and the future occurrence of moorland wildfires in the Peak District of the UK
Source: Climate Research 45: 105-118
Year: 2010
Keywords: climate
Contact: jonathan.aylen@manchester.ac.uk
FRI Access Number: 96765
Author(s): Alexis, M. A., C. Rumpel, H. Knicker, J. Leifeld, D. Rasse, N. Pechot, G. Bardoux, A. Mariotti
Title: Thermal alteration of organic matter during a shrubland fire: A field study
Source: Organic Geochemistry 01/2010; DOI: 10.1016/j.orggeochem.2010.03.003
Year: 2010
Keywords: Temperature soils
Abstract: Vegetation fires profoundly alter the C cycle of terrestrial ecosystems, notably through the potential formation of highly stable pyrogenic structures. Fire-induced changes in the structure of organic matter (OM) have been studied mainly under controlled...
Contact: marie.alexis@upmc.fr
FRI Access Number: 96756

Author(s): Alexander, K.
Title: Victoria: State of the environment report 2013
Source: Victoria Commissioner for Environmental Sustainability
Year: 2014
Keywords: statistics ecology australia
Abstract: ... Threatening processes are once again habitat loss and fragmentation, ongoing degradation of remaining habitat from invasive species, grazing, and inappropriate fire regimes (p.71). Fire data is deeply disturbing. Fire regimes...

Author(s): Alexander, Martin E., Baxter, Gregory J., Dakin, Gary R.
Title: How much time does it take for a wildland firefighter to reach a safety zone
Year: 2013
Keywords: safety
Contact: mea2@telus.net

Author(s): Andrea, C., Tracy Durrant and Jesus San-Miguel-Ayanz
Title: The European Fire Database: Technical specifications and data submission
Source: European Union, Joint Research Centre, 23 pages
Year: 2014
Keywords: cooperation
Abstract: The European Fire Database is an important component of the European Forest Fire Information System (EFFIS), the EC focal point of information on forest fires established by the Joint Research Centre (JRC) and the Directorate General for Environment to provide...
FRI Access Number: 96905

Author(s): Angstmann, J. L., B. E. Ewers, H. Kwon
Title: Size-mediated tree transpiration along soil drainage gradients in a boreal black spruce forest wildfire chronosequence
Source: Tree Physiology 32(5): 599-61
Year: 2012
Keywords: ecology hydrology
Abstract: Boreal forests are crucial to climate change predictions because of their large land area and ability to sequester and store carbon, which is controlled by water availability. Heterogeneity of these forests is predicted to increase with climate change through more frequent wildfires, warmer, longer growing seasons...
Contact: jangstma@asu.edu
FRI Access Number: 95256

Author(s): Anonymous
Title: Removing combustible debris beneath floor plates on Polaris Rangers
Source: Rapid Lesson Sharing, Lessons Learned Center, Tuscon, 1 page
Year: 2014
Keywords: investigation accident
FRI Access Number: 96910

Author(s): Anonymous
Title: Serious burn injuries caused by fuel leaking onto pants
Source: Rapid Lesson Sharing, Lessons Learned Center, Tuscon, 1 page
Year: 2014
Keywords: investigation injuries
FRI Access Number: 96909

Author(s): Anonymous
Title: The Fire Smart Home Handbook: Preparing for and Surviving the Threat of Wildfire
Source: Publishers Weekly 261(11): 80
Year: 2014
Keywords: interface

Author(s): Anonymous
Title: Record heat behind bush fires
Source: New Scientist 220(2940): 7
Year: 2013
Keywords: behavior

Author(s): Anonymous
Title: The Fire Smart Home Handbook: Preparing for and Surviving the Threat of Wildfire
Source: Publishers Weekly 261(11): 80
Year: 2014
Keywords: interface

Author(s): Anonymous
Title: USA Firefighter Fatality notification
Source: U. S. Fire Administration, 1 page
Year: 2014
Keywords: pack test fatality
FRI Access Number: 96898

Author(s): Anonymous
Title: Prepare for the Threat of Wildfire
Source: Horse & Rider 52(6): 28
Year: 2014
Keywords: horses pets

Author(s): Anonymous
Title: Big Windy water tender rollover
Source: 24-hour preliminary report, 1 page
Year: 2013
Keywords: fatality vehicle accident
FRI Access Number: 96891

Author(s): Anonymous
Title: Big Windy water tender rollover
Source: 72-hour expanded report, 2 pages
Year: 2013
Keywords: fatality vehicle accident
FRI Access Number: 96890

Author(s): Anonymous
Title: Big Windy water tender rollover
Source: Final Accident Investigation Factual Report, 26 pages
Year: 2013
Keywords: fatality vehicle accident
FRI Access Number: 96889

Author(s): Anonymous
Title: Slash and burn
Source: Architectural Review 235(1406): 115-117
Year: 2014
Keywords: slash-and-burn agriculture tropics

Author(s): Anonymous
Title: More, Bigger Wildfires Hit Western U.S. in Last 30 Years: Study
Source: Claims 62z(5): 10
Year: 2014
Keywords: insurance
FRI Access Number: 96806
Author(s): Anonymous  
**Title:** Onset of Rhabdo during physical training  
**Source:** Rapid Lesson Sharing, Lessons Learned Center, 2 pages  
**Year:** 2014  
**Keywords:** health firefighters safety  
**FRI Access Number:** 96697

Author(s): Anonymous  
**Title:** Grassy Mountain Complex Contractor Fatality  
**Source:** Serious Accident Investigation, Factual Report, 13 pages  
**Year:** 2013  
**Keywords:** safety investigation fatality  
**FRI Access Number:** 96720

Author(s): Anonymous  
**Title:** Grassy Mountain Fire, 20 miles south east of Rome, Oregon  
**Source:** 24-hour preliminary report, Bureau of Land Management, Vale, Oregon,  
**Year:** 2013  
**Keywords:** safety investigation fatality  
**FRI Access Number:** 96721

Author(s): Anonymous  
**Title:** Preliminary 24-hour briefing of fire shelter use  
**Source:** U. S. Department of Agriculture, San Bernardino, CA, 1 page  
**Year:** 2013  
**Keywords:** shelter safety equipment  
**FRI Access Number:** 96702

Author(s): Anonymous  
**Title:** Leaders fiddle as Sumatra burns  
**Source:** The Economist, March 22-28, 2014, page 42  
**Year:** 2014  
**Keywords:** slash-and-burn tropics smoke  
**FRI Access Number:** 96232

Author(s): Areval, J. R., S. Fernandez-Lugo, A. Naranjo-Cigala, M. Salas, R. Ruiz, R. Ramos and M. Moreno  
**Title:** Post-fire recovery of an endemic Canarian pine forest  
**Source:** International Journal of Wildland Fire 23: 403-409  
**Year:** 2014  
**Keywords:** ecology rare endangered  
**Abstract:** In the Canary Islands, wildfires are recurrent in pine forests, and have been reported by the media as an ecological disaster. We investigated fire effect on vegetation and soil
Current Titles in Wildland Fire, July, 2014

nutrients in a well-preserved Canarian pine forest. Results indicated positive effects of fire, such as increased soil organic matter and forest regeneration 4 years after fire.

Contact: jarevalo@ull.es
FRI Access Number: 96714

Author(s): Aricak, B., O. Kucuk, K. Enez
Title: Determining a Fire Potential Map Based on Stand Age, Stand Closure and Tree Species, Using Satellite Imagery (Kastamonu Central Forest Directorate Sample)
Source: Croatian Journal of Forest Engineering 35(1):
Year: 2014
Keywords: suppression remote sensing
Abstract: Becoming successful in fighting forest fires is not only a matter of taking the required measures into consideration and efficiently and economically using the resources, but also employing the cutting edge science and technology in every aspect of the process...
Contact: baricak@kastamonu.edu.tr

Author(s): Arms, Michael M., John D. Van Zante
Title: Wildfire evacuation: outrunning the witch's curse--one animal center's experience
Source: ILAR journal / National Research Council, Institute of Laboratory Animal Resources 03/2010; 51(2):158-63
Year: 2010
Keywords: evacuation interface
Abstract: When the Witch Creek Fire began ravaging San Diego County, California, in October 2007 there was no way of knowing how far it would spread, how many homes it would destroy, how many families would be evacuated, or how many lives would be lost. There wasn't going to be any trail of bread crumbs to lead us out of the burning forest and safely back home. We weren't going to wake up and realize that it was a bad dream. This Witch was real and was devouring everything in her path. There might not be a home for us to return to...
Contact: johnv@animalcenter.org
FRI Access Number: 96869

Author(s): Arthur, Rick
Title: Reducing the risks of prescribed fire: The Evan Thomas Burn
Year: 2013
Keywords: prescribed burning

Author(s): Aslan, Yunus Emre
Title: A framework for use of wireless sensor networks in forest fire detection and monitoring
Source: M. S. Thesis, Bilkent University, 86 pages
Year: 2010
Keywords: detection
Author(s): Aslan, Yunus Emre, Ibrahim Korpeoglu, and Ozgur Ulusoy
Title: A framework for use of wireless sensor networks in forest fire detection and monitoring
Year: 2012
Keywords: detection
Contact: aslany@cs.bilkent.edu.tr

Author(s): Attiwill, P. M., M. F. Ryan, N. Burrows, N. P. Cheney, L. McCaw
Title: Logging and fire in Australian forests: misrepresentation, data and models, and a response to Bradstock & Price (2014)
Source: Conservation Letters, available online, 2014
Year: 2014
Keywords: silviculture australia
Abstract: Bradstock & Price (2014) use strong language to disagree with the conclusions of Attiwill et al.(2013), but strong language does not of itself make a strong argument. Their concerns relate to how we treat their data and modeling (Price & Bradstock 2012) on...
Contact: attiwill@unimelb.edu.au

Author(s): Augustine, David J., Paul Brewer, Dana M. Blumenthal, Justin D. Derner, Joseph C. von Fischer
Title: Prescribed fire, soil inorganic nitrogen dynamics, and plant responses in a semiarid grassland
Source: Journal of Arid Environments 104, 59e66
Year: 2014
Keywords: prescribed burning soils ecology
Abstract: In arid and semiarid ecosystems, fire can potentially affect ecosystem dynamics through changes in soil moisture, temperature, and nitrogen cycling, as well as through direct effects on plant meristem mortality. We examined effects of annual and triennial prescribed fires conducted in early spring on soil moisture, temperature, and N, plant growth, and plant N content in semiarid shortgrass steppe. Annual burning increased soil inorganic N availability throughout the...
Contact: david.augustine@ars.usda.gov
FRI Access Number: 95891

Author(s): Ball, P. N., M. D., MacKenzie, T. H. DeLuca, W. E. Holben
Title: Wildfire and charcoal enhance nitrification and ammonium-oxidizing bacterial abundance in dry montane forest soils.
Year: 2010
Keywords: soils
Abstract: All forest fire events generate some quantity of charcoal, which may persist in soils for hundreds to thousands of years. However, few studies have effectively evaluated the potential for charcoal to influence specific microbial communities or processes. To our knowledge, no studies have specifically addressed the effect of charcoal on ammonia-oxidizing bacteria (AOB) in forest soils. Controlled experiments have shown that charcoal amendment of fire-excluded temperate and boreal coniferous forest soil increases net nitrification, suggesting that charcoal plays a major role in maintaining nitrification for extended periods postfire. In this study...

Contact: patrickb@uoregon.edu
FRI Access Number: 96574

Author(s): Ball, Jarrod T.
Title: Veterans service as wildland firefighters
Source: Wildfire, available online, October 2013
Year: 2013
Keywords: military firefighters
FRI Access Number: 94726

Author(s): Banwell, Erin M. and J. Morgan Varner
Title: Structure and composition of forest floor fuels in long-unburned Jeffrey pine-white fir forests of the Lake Tahoe Basin, USA
Source: International Journal of Wildland Fire 23: 363-372
Year: 2014
Keywords: ecology
Abstract: Forest floor (litter, fermentation and humus) load, composition, depth, bulk density and mineral content were studied in Jeffrey pine-white fir forests. Forest floor fuels varied spatially in relation to distance from tree boles. The structural and compositional diversity in these fuels underscores our need to better understand forest floor fuels.
Contact: edu.g.ferreiro@gmail.com
FRI Access Number: 96710

Author(s): Banks, Sam C., Geoffrey J. Cary, Annabel L. Smith, Ian D. Davies, Don A. Driscoll, A. Malcolm Gill, David B. Lindenmayer and Rod Peakall3
Title: How does ecological disturbance influence genetic diversity?
Source: Trends in Ecology & Evolution, November 2013, Vol. 28, No. 11
Year: 2013
Keywords: genetics
FRI Access Number: 96805

Author(s): Bargman, T., I. E. Maren, V. Vandvik
Title: Life after fire: smoke and ash as germination cues in ericads, herbs and graminoids of northern heathlands
Source: Applied Vegetation Science, available online 2014
Year: 2014
**Keywords:** smoke regeneration

**Abstract:** The efficacy of smoke, charred wood, ash and heat in promoting germination has been documented in a wide range of species and systems, but relatively little work has been done on fire-related cues in northern European heathlands under anthropogenic fire...

**Contact:** tessa.bargmann@bio.uib.no

**Author(s):** Bargman, T., I. E. Maren, V. Vandvik

**Title:** Life after fire: smoke and ash as germination cues in ericads, herbs and graminoids of northern heathlands

**Source:** Poster, unknown source

**Year:** 2014

**Keywords:** smoke regeneration

**Abstract:** The efficacy of smoke, charred wood, ash and heat in promoting germination has been documented in a wide range of species and systems, but relatively little work has been done on fire-related cues in northern European heathlands under anthropogenic fire...

**Contact:** tessa.bargmann@bio.uib.no

**FRI Access Number:** 96744

**Author(s):** Beatty, Sarah M, James E Smith

**Title:** Infiltration of water and ethanol solutions in water repellent post wildfire soils

**Source:** Journal of Hydrology 514:233

**Year:** 2014

**Keywords:** soils hydrology

**Abstract:** Dynamic soil water repellency is a pending challenge in water repellency research. The dynamic change or temporal dependence of repellency is commonly expressed as the persistence of repellency. Persistence, or dynamic changes in contact angle, are however, difficult to directly measure and incorporate into mechanistic conceptual and numerical models. To provide insight...

**Contact:** smithja@mcmaster.ca

**FRI Access Number:** 96872

**Author(s):** Bencardino, Mariantonio M., Nicola N. Pirrone, Francesca F. Sprovieri

**Title:** Aerosol and ozone observations during six cruise campaigns across the Mediterranean basin: Temporal, spatial, and seasonal variability

**Source:** Environmental Science and Pollution Research International 21(6):4044-4062

**Year:** 2014

**Keywords:** smoke

**Abstract:** The Mediterranean basin, because of its semi-enclosed configuration, is one of the areas heavily affected by air pollutants. Despite implications on both human health and radiative budget involving an increasing interest, monitoring databases measuring air pollution directly over this area are yet r...

**Contact:** bencardino@iia.cnr.it

**FRI Access Number:** 96780
Author(s): Benazza-Benyahia, Amel, Noura Hamouda, Fethi Tlili and Safa Ouerghi
Title: Early Smoke Detection in Forest Areas from DCT Based Compressed Video
Source: 20th European Signal Processing Conference (EUSIPCO-2012), Bucharest, Romania, 27-31 August 2012
Year: 2012
Keywords: detection
Contact: benazza.amel@supcom.rnu.tn
FRI Access Number: 95199

Author(s): BIBA, ERIN
Title: Predicting wildfires could save lives. So why are we so bad at it?
Source: Popular Science 284(5): 38
Year: 2014
Keywords: interface
FRI Access Number: 96807

Author(s): Bista, D. and R. Paudel
Title: An Overview of the Status and Conservation Initiatives of Red Panda Ailurus fulgens (Cuvier, 1825) in Nepal
Source: The Initiation 5: 171-181
Year: 2014
Keywords: rare endangered wildlife
Abstract: ... Forest fire, rotational grazing, slash and burn cultivation, timber and fire wood collection, predation by dogs, natural dying of ringal bamboo species, drought, landslide and lack of awareness are identified as the major conservation threats for Red Panda throughout its habitat...

Author(s): Black, H., Dominik Kulakowski, Barry R. Noon, and Dominick A. DellaSala
Title: Do Bark Beetle Outbreaks Increase Wildfire Risks in the Central U.S. Rocky Mountains? Implications from Recent Research, Scott
Source: Natural Areas Journal 33(1):59-65
Year: 2013
Keywords: insects
Abstract: Appropriate response to recent, widespread bark beetle (Dendroctonus spp.) outbreaks in the western United States has been the subject of much debate in scientific and policy circles. Among the proposed responses have been landscape-level mechanical treatments to prevent the further spread of outbreaks and to reduce the fire risk that is... Contact: sblack@xerces.org
FRI Access Number: 96825
Current Titles in Wildland Fire, July, 2014

Author(s): Brando, P. M., J. K. Balch, D. C. Nepstad, D. C. Morton, Francis E. Putzg, Michael T. Coeb, Divino Silverioa, Marcia N. Macedo, Eric A. Davidson, Caroline C. Nobregaa, Ane Alencara, and Britaldo S. Soares-Filho
Title: Abrupt increases in Amazonian tree mortality due to drought-fire interactions
Year: 2014
Keywords: ecology
Abstract: Interactions between climate and land-use change may drive widespread degradation of Amazonian forests. High-intensity fires associated with extreme weather events could accelerate this degradation by abruptly increasing tree mortality, but this...
Contact: pmbrando@ipam.org.br
FRI Access Number: 96726

Author(s): Bristow, Nathan A., Peter J. Weisberg and Robin J. Tausch
Title: A 40-year record of tree establishment following chaining and prescribed fire in pinyon-juniper woodlands
Source: Rangeland Ecology & Management
Year: 2014
Keywords: prescribed burning encroachment
Abstract: Chaining and prescribed fire treatments have been widely applied throughout the pinyon-juniper woodlands of the western United States in an effort to reduce tree cover and stimulate understory growth. Our objective was to quantify effects of treatment on...
Contact: rtausch@fs.fed.us

Author(s): Brisbin, Hondo, Andrea Thode, Matt Brooks, Karen Weber
Title: Soil Seed Bank Responses to Postfire Herbicide and Native Seeding Treatments Designed to Control Bromus tectorum in a Pinyon-Juniper Woodland at Zion National Park, USA
Source: Invasive Plant Science and Management 6(1): 118
Year: 2013
Keywords: regeneration seeds
Abstract: The continued threat of an invasive, annual brome (Bromus) species in the western United States has created the need for integrated approaches to postfire restoration. Additionally, the high germination rate, high seed production and seed bank carryover of annual bromes points to the need to assay soil seed banks as part of monitoring programs. We sampled the soil seed bank to help assess the effectiveness of treatments utilizing the...
Contact: hondo_brisbin@yahoo.com %o fire research institute, pdf number 95229

Author(s): Brossier, Benoit, France Oris, Walter Finsinger, Hugo Asselin, Yves Bergeron, and Adam A Ali
Title: Using tree-ring records to calibrate peak detection in fire reconstructions based on sedimentary charcoal records
Source: The Holocene 24: 635-645
Current Titles in Wildland Fire, July, 2014

Year: 2014
Keywords: paleohistory
Abstract: We compared fire episodes over the past 150 years reconstructed using charcoal particles retrieved from well-dated sediment deposits from two small lakes in the eastern Canadian boreal forest, with dendrochronological reconstructions of fire events from the corresponding watersheds. Fire scars and...
Contact: Benoit.brossier@um2.fr
FRI Access Number: 96917

Author(s): Brown, Martin J., Kertis, Jane, Huff, Mark H.
Title: Natural tree regeneration and coarse woody debris dynamics after a forest fire in the western Cascade Range
Year: 2013
Keywords: fuel ecology
FRI Access Number: 95182

Author(s): Brose, Patrick H.
Title: Post-harvest prescribed burning of oak stands: An alternative to the shelterwood-burn technique?
Source: Proceedings, 18th Central Hardwood Forest Conference; 2012 March 26-28; Morgantown, WV. Newtown Square, Pa.: U.S. Department of Agriculture, Forest Service, Northern Research Station, 2013: p. 352-364
Year: 2013
Keywords: silviculture prescribed burning
FRI Access Number: 95939

Author(s): Bryant, Richard A., Elizabeth Waters, Lisa Gibbs, H. Colin Gallagher, Philippa Pattison, Dean Lusher, Colin MacDougall, Louise Harms, Karen Block, Elyse Snowdon, Vikki Sinnott, Greg Ireton, John Richardson and David Forbes
Title: Psychological outcomes following the Victorian Black Saturday bushfires
Source: Australian and New Zealand Journal of Psychiatry. published 22 May 2014,
Year: 2014
Keywords: psychology australia
Abstract: Several years following the Black Saturday bushfires the majority of affected people demonstrated resilience without indications of psychological distress. A significant minority of people in the high-affected communities reported persistent PTSD, depression, and psychological distress, indicating the need...
Contact: r.bryant@unsw.edu.au
Author(s): Buma, Brian, Rebecca E. Poore, Carol A. Wessman
Title: Disturbances, Their Interactions, and Cumulative Effects on Carbon and Charcoal Stocks in a Forested Ecosystem
Source: Ecosystems, available online, 2014
Year: 2014
Keywords: ecology carbon
Abstract: Disturbances have a strong role in the carbon balance of many ecosystems, and the cycle of vegetation growth, disturbance, and recovery is very important in determining the net carbon balance of terrestrial biomes. Compound disturbances are...
Contact: brian.buma@uas.alaska.edu
FRI Access Number: 96576

Author(s): Burtz, R. and A. Bright
Title: Value Orientations and Attitudes Toward Wildfire Management: An Exploration of Integrative Complexity
Source: International Journal of Sociology Study 2(1): 9 pages
Year: 2014
Keywords: psychology management
Abstract: Understanding how citizens perceive management decisions is essential to land managers success in negotiating management plans that are acceptable to the public. Beyond what the public thinks (e.g., attitudes toward a natural resource issue), it is important to understand how they think about the issue. In order to study how people think...
Contact: randy.burtz@wwu.edu
FRI Access Number: 96238

Author(s): Butler, B. W.
Title: Wildland firefighter safety zones: A review of past science and summary of future needs
Year: 2014
Keywords: safety
Abstract: The scientific basis for wildland firefighter safety zone guidelines is summarised. Experimental and theoretical studies are reviewed. Current understanding is evaluated within the context of a selection of wildland fire entrapments. Recommendations are presented for additional work needed to more completely address the question of what constitutes an effective wildland firefighter safety zone.
Contact: bwbutler@fs.fed.us
FRI Access Number: 96705

Author(s): Caccamo, G., L. A. Chisholm, R. Bradstock, M. L. Puotinen
Title: A comparative analysis of MODIS based spectral indices for drought monitoring over fire prone vegetation types
Source: AGU Fall Meeting Abstracts 12/2010;
Year: 2013
Keywords: remote sensing
Abstract: Drought is a complex natural hazard with severe impacts on ecosystems. Several studies have highlighted links between drought spatio-temporal patterns and wildfire behaviour. Recent research showed drought can affect the development of... %o contact gc996@uowmail.edu.au

Author(s): Cai, Longyan, He, Hong S., Wu, Zhiwei, Lewis, Benard L., Liang, Yu
Title: Development of Standard Fuel Models in Boreal Forests of Northeast China through Calibration and Validation
Year: 2014
Keywords: fuel china
Contact: sanbei82@163.com
FRI Access Number: 96796

Author(s): Calheiros, Tomas., Mario Pereira, Carlos Camara
Title: Assessment of the potential effects of regional climate change on wildfires
Source: EGU General Assembly 2010, held 2-7 May, 2010 in Vienna, Austria, p.14076
Year: 2010
Keywords: climate
Abstract: It has been shown that the extent of burned area in Portugal is controlled by two main atmospheric factors (Pereira et al. 2005): i) a long-term control related to the regime of temperature and precipitation during spring, in the pre-fire season and ii) a short-term control exerted by the occurrence of very intense dry spells in days of extreme synoptic situations during the fire season, in summer. This information has been applied to develop simple multiple linear regression models based on meteorological...
Contact: tomascalheiros@hotmail.com
FRI Access Number: 96864

Author(s): Campos, I., N. Abrantes, T. Vidal, A. C. Bastos, F. Goncalves, J. J. Keizer
Title: Assessment of the toxicity of ash-loaded runoff from a recently burnt eucalypt plantation
Source: Eur J Forest Research, available online 2014
Year: 2011
Keywords: soils
Abstract: Although wildfires are identified as an important source of polycyclic aromatic hydrocarbons (PAHs) and PAHs are well-known for their pernicious properties, the toxicity of runoff from recently burnt areas has received little research attention. This knowledge gap was addressed here through laboratory assays in which four...
Contact: isabel.ncampos@gmail.com
FRI Access Number: 96838
Author(s): Can Tunca, Sinan Isik, M. Yunus Donmez, and Cem Ersoy
Title: Performance Evaluation of Heterogeneous Wireless Sensor Networks for Forest Fire Detection
Source: 21th I's Signal Processing and Communications Applications Conference (SIU2013), Cyprus, 24-26 April 2013
Year: 2013
Keywords: detection

Author(s): Caponio, Andrea, Ferrante Neri, Giuseppe Gliberti, Giuseppe Lorusso, G. L. Cascella, D. Cascella
Title: Design of position controller for PMSM drive in paiss project for early wildfire detection by means of differential evolution with Scale Factor Local Search
Source: International Symposium on Industrial Electronics (ISIE), 2010 I's, 4-7 July, 2010, pages 3392-3397
Year: 2010
Keywords: detection
Abstract: This paper proposes the application of Differential Evolution with Scale Factor Local Search to optimally design the control system of a permanent-magnet synchronous motor which is part of the UPR probe, element of the more complex PAIS system. The PAIS system is an innovative Wireless Sensor Network for the environmental monitoring whose...

Author(s): Cardil, Adrian, Salis, Michele, Spano, Donatella, Delogu, Giuseppe, Terren, Domingo Molina
Title: Large wildland fires and extreme temperatures in Sardinia (Italy)
Source: iForest - Biogeosciences & Forestry 7(3): 162-169
Year: 2014
Keywords: conflagration italy
FRI Access Number: 96922

Author(s): Carvalho, G. H., M. A. Batalha, I. A. Silva, M. V. Cianciaruso
Title: Are fire, soil fertility and toxicity, water availability, plant functional diversity, and litter decomposition related in a Neotropical savanna?
Source: Oecologia, available online, 2014
Year: 2014
Keywords: soils
Abstract: Understanding how biodiversity and ecosystem functioning respond to changes in the environment is fundamental to the maintenance of ecosystem function. In realistic scenarios, the biodiversity-ecosystem functioning path may account for only a small share...
Contact: gustavo.bio@gmail.com

Author(s): Casas, Pau Fonseca, M xim Colls, Josep Casanovas Garcia
Title: Towards a representation of environmental models using specification and description language: from the fibonacci model to a wildfire model
Source: unknown publication, 4 pages
Current Titles in Wildland Fire, July, 2014

Year: 2010  
**Keywords:** modeling  
**Abstract:** In this paper we explore how we can use Specification and Description Language (SDL) to represent environmental models. Since the main concern in this kind of models is the representation of the geographical information data, we analyze how we can represent this information in the SDL diagrams. We base our approach using two examples...  
**Contact:** pau@fib.upc.edu  
**FRI Access Number:** 96549

**Author(s):** Cerevkova, Andrea, Marek Renco, Ludovit Cagan  
**Title:** Short-term effects of forest disturbances on soil nematode communities in European mountain spruce forests  
**Source:** Journal of Helminthology 10/2012  
**Year:** 2012  
**Keywords:** ecology soils nematodes  
**Abstract:** The nematode communities in spruce forests were compared with the short-term effects of forest damage, caused by windstorm, wildfire and management practices of forest soils. Soil samples were collected in June and October from 2006 to 2008 in four different sites: (1) forest unaffected by the wind (REF); (2) storm-felled forest with salvaged...  
**Contact:** cerev@saske.sk  
**FRI Access Number:** 95233

**Author(s):** Chauhan, Anamika, Rahul Chauhan, Sunil Semwal  
**Title:** Early Detection of Forest Fire Using Wireless Sensor Network  
**Source:** International Journal of Engineering Research and Applications 3(4): 163-168  
**Year:** 2013  
**Keywords:** detection  
**Abstract:** Wireless sensor network have a broad range of applications in the category of environmental monitoring. In this paper, the problem of forest fire is considered and a comprehensive framework is proposed for the use of wireless sensor networks for real-time forest fire detection and monitoring. The wireless...  
**FRI Access Number:** 96800

**Author(s):** Chen-Charpentier, B., M. C. A. Leite  
**Title:** A model for coupling fire and insect outbreak in forests  
**Source:** Ecological Modelling 286: 26-36  
**Year:** 2014  
**Keywords:** modeling insects  
**Abstract:** Predictive models of insect outbreak exist for some processes for few species, but an additional and rarely explored complication is the potential interaction between insect outbreak and wildfire disturbances in forests. The association between insect and fire dynamics is complex, particularly when evaluated over time and at large scale, and no consensus exists in the published literature about its consequences. Thus, more insights on the issue would be useful to scientists, resource...
Current Titles in Wildland Fire, July, 2014

Contact: bmchen@uta.edu
FRI Access Number: 96900

Author(s): Chiao-Ying Chou, Bo Song, Roy L. Hedden, Thomas M. Williams, Joseph D. Culin, Christopher J. Post
Title: Three-Dimensional Landscape Visualizations: New Technique towards Wildfire and Forest Bark Beetle Management
Source: Forests 1(2):82-98
Year: 2010
Keywords: insects
Abstract: After a century of fire exclusion, western US forests are vulnerable to wildfire and bark beetles. Although integrated fire and pest management programs (e.g., prescribed burning and thinning) are being implemented efficiently, damage to forests continues. Management challenges come in the forms of diverse land ownership...
Contact: cchou@clemson.edu
FRI Access Number: 96854

Author(s): Chowdhury, E. H., Q. K. Hassan
Title: Operational perspective of remote sensing-based forest fire danger forecasting systems
Year: 2014
Keywords: remote sensing
Abstract: Forest fire is a natural phenomenon in many ecosystems across the world. One of the most important components of forest fire management is the forecasting of fire danger conditions. Here, our aim was to critically analyse the following issues,(i) current...
Contact: qhassan@ucalgary.ca
FRI Access Number: 96767

Author(s): Christy, J. A., C. N. McCain, S. E. Greene, J. D. Lippert
Title: Fire Effects in a Montane Wetland, Central Cascade Range, Oregon
Source: Madrono 61(2): 201-217
Year: 2014
Keywords: ecology
Abstract: The stand-replacing Charlton, OR wildfire of 1996 burned several vegetation transects established before the fire, providing an opportunity to document recovery in one upland and five wetland vegetation zones over a 12-year period. Total mean percent...
Contact: john.christy@pdx.edu

Author(s): Christianse, T. B.
Title: Relating Land Cover Change to Fire Frequency, Precipitation, and Grazing Pressure in a Savanna Ecosystem
Source: Class Paper, GEO 386G, Mark Helper, 18 pages
Year: 2014
Keywords: ecology wildlife
Abstract: Savannas are defined as tropical and near-tropical ecosystems characterized by a continuous herbaceous layer and a discontinuous layer of trees and shrubs. The herbaceous layer consists mainly of heliophilous C4 grasses but also...
FRI Access Number: 96748

Author(s): Comas. C., S. Costafreda-Aumedes, C. Vega-Garcia
Title: Characterizing configurations of fire ignition points through spatiotemporal point processes
Source: Unknown source
Year: 2014
Keywords: ignition modeling
Abstract: Human-caused forest fires are usually regarded as unpredictable but often exhibit trends towards clustering in certain locations and periods. Characterizing such configurations is crucial for understanding spatiotemporal fire dynamics and implementing...
Contact: carles.comas@matematica.udl.cat
FRI Access Number: 96649

Author(s): Costa, Augusta, Madeira, Manuel, Santos, Jose Lima
Title: Is cork oak (Quercus suber L.) woodland loss driven by eucalyptus plantation? A case study in southwestern Portugal
Source: iForest - Biogeosciences & Forestry 7(3): 193-203
Year: 2014
Keywords: ecology silviculture

Author(s): Crane, E., N. Freeman, B. Toth
Title: Cluster growth in the mean field forest fire model
Year: 2014
Keywords: modeling
Abstract: We investigate the growth of clusters within the mean field forest fire model of \( R^{\alpha} \) th and \( T^{\delta} \) th [21]. The model is a continuous-time Markov process, similar to the dynamical Erd\( \gamma \) H (o) sR\( \{e\} \) nyi random graph but with the addition of so-called fires. A particle may...
Contact: edward.crane@bristol.ac.uk
FRI Access Number: 96897

Author(s): Cruz, Miguel G. and Martin E. Alexander
Title: Uncertainty associated with model predictions of surface and crown fire rates of spread
Source: Environmental Modelling and Software 47: 16-28
Year: 2013
Keywords: modeling behavior
Abstract: The degree of accuracy in model predictions of rate of spread in wildland fires is dependent on the model's applicability to a given situation, the validity of the model's relationships, and the reliability of the model input data. On the basis of a compilation of 49 fire spread model evaluation datasets involving 1278 observations in seven different fuel type groups, the limits on the predictability of current...

Contact: miguel.cruz@csiro.au
FRI Access Number: 94724

Author(s): Dacamara, C. C., R. Libonati, A. Barros, G. Gaspar, T. J. Calado
Title: Using MODIS imagery to assign dates to maps of burn scars in Portugal
Source: Geophysical Research Abstracts 14, EGU2012-12485, 2012
Year: 2012
Keywords: remote sensing
Abstract: In the European context, Portugal presents the highest number of fire occurrences and has the largest area affected by wildfires. Like other southern regions of Europe, Portugal has experienced a dramatic increase in fire incidence during the last few decades that has been attributed to modifications in land-use as well as to climatic changes...

FRI Access Number: 95176

Author(s): Dahl, N.
Title: Coupling the Advanced Regional Prediction System and the Discrete Event Specification Fire Spread Model to Predict Wildfire Behavior
Source: Ph. D. Dissertation, University of Oklahoma, 154 pages
Year: 2014
Keywords: behavior
Abstract: The cost of wildfire suppression in the United States has risen dramatically over the last 20 years. As the interface between wildland and urban areas expands, increased emphasis is being placed on rapid, efficient deployment of firefighting resources. Various numerical...

FRI Access Number: 96907

Author(s): Danko, Joseph III, Rogan, John, Kulakowski, Dominik, McConnell, Maureen
Title: Mapping Burn Severity using the Composite Burn Index in an Oak Savannah in Central Massachusetts
Source: Geographical Bulletin 55(1): 36-48
Year: 2014
Keywords: severity
Contact: jdanko@clarku.edu
FRI Access Number: 96794

Author(s): Davies, Kirk W., Jon D. Bates, Chad S. Boyd and Aleta M. Nafus
Title: Is fire exclusion in mountain big sagebrush communities prudent? Soil nutrient, plant diversity and arthropod response to burning
Abstract: Fire has been excluded from many high elevation sagebrush communities because of current management policies. Fire, however, may be important in these ecosystems. We found that fire creates spatial and temporal heterogeneity in soil nutrients, arthropods and plant diversity. This suggests that fire exclusion may have some negative effects and that management may need to include infrequent fire.

Contact: kirk.davies@oregonstate.edu

Author(s): Daxin ZHU, Danlin CAI
Title: Forest fire monitoring system structure and node design based on wireless sensor network
Source: PRZEGLD ELEKTROTECHNICZNY, ISSN 0033-2097, R. 89 NR 1b/2013
Year: 2013
Keywords: detection
FRI Access Number: 96797

Author(s): de Lafontaine, G. and Asselin, H
Title: Soil charcoal stability over the Holocene - Response to comments by Mikael Ohlson
Source: Quaternary Research 78: 155-156
Year: 2012
Keywords: paleohistory
Contact: gdelafon@pierroton.inra.fr
FRI Access Number: 95216

Author(s): de Lafontaine, G. and Asselin, H
Title: Soil charcoal stability over the Holocene across boreal northeastern North America
Source: Quaternary Research 76: 196-200
Year: 2011
Keywords: paleohistory
Contact: gdelafon@pierroton.inra.fr
FRI Access Number: 95217

Author(s): De Michele, C. and F. Accatino
Title: Tree Cover Bimodality in Savannas and Forests Emerging from the Switching between Two Fire Dynamics
Source: PLOS ONE, 2014
Year: 2014
Keywords: grasslands ecology
Abstract: Moist savannas and tropical forests share the same climatic conditions and occur side by side. Experimental evidences show that the tree cover of these ecosystems exhibits a bimodal frequency distribution. This is considered as a proof of savanna-forest...
Contact: carlo.demichele@polimi.it
Current Titles in Wildland Fire, July, 2014

FRI Access Number: 96237

Author(s): Di Mauro, B., F. Fava, L. Busetto, G. F. Crosta, R. Colombo  
Title: Post-fire resilience in the Alpine region estimated from MODIS satellite multispectral data  
Year: 2014  
Keywords: remote sensing  
Abstract: In this study, a methodology based on the analysis of MODIS (MODerate-resolution Imaging Spectroradiometer) time series was developed to estimate post-fire resilience of Alpine vegetation. To this end, satellite images of two vegetation indices (VIs), the Normalized Difference Vegetation Index (NDVI) and the Enhanced Vegetation Index (EVI) were used. The analysis...  
Contact: b.dimauro@campus.unimib.it  
FRI Access Number: 96837

Author(s): Di Stefano, J., M. A. McCarthy, A. York, T. J. Duff, J. Slingo  
Title: Defining vegetation age class distributions for multispecies conservation in fire-prone landscapes  
Source: Biological Conservation 166: 111-117  
Year: 2013  
Keywords: ecology  
Abstract: The generation of heterogeneous fire mosaics is commonly advocated as a strategy for biodiversity conservation in flammable ecosystems, but it is usually unclear how mosaic properties link to biodiversity outcomes. Here we define a formal relationship between...  
Contact: juliands@unimelb.edu.au  
FRI Access Number: 96436

Author(s): Dimitropoulos, Kosmas, Osman Gunay, Kivanc Kose, Fatih Erden, Ferdaous Chaabane, Filareti Tsalakanidou, Nikos Grammalidis, A. Enis Cetin  
Title: Video-based flame detection for the protection of Cultural Heritage  
Year: 2013  
Keywords: remote sensing  
Abstract: The majority of cultural heritage and archaeological sites, especially in the Mediterranean region, are covered with vegetation, which increases the risk of fires. These fires may also break out and spread towards nearby forests and other wooded land, or conversely start in nearby forests and spread to archaeological sites. Beyond taking precautionary...  
Contact: gunayosman@gmail.com  
FRI Access Number: 95196
Author(s): Disney, M. I., P. Lewis, J. Gomez-Dans, D. Roy, M.J. Wooster, D. Lajas  
Title: Radiative Transfer Modelling for the characterisation of natural burnt surfaces  
Source: University of London, 4 pages  
Year: 2010  
Keywords: physics  
Abstract: Fire is arguably the most important and widespread agent of ecosystem disturbance worldwide. It affects the Carbon cycle, is a control on ecosystem structure, and can potentially impact humans both directly and indirectly. There is a long history of using Earth Observation (EO) data in monitoring wildfires that has led to the development of operational products measuring fire occurrence. These tend to use...  
FRI Access Number: 96830

Author(s): Donglin Wang, Fadhel M. Ghannouchi  
Title: Handset-Based Positioning System for Injured Fireman Rescue in Wildfire Fighting  
Source: I's Systems Journal 6(4): 603-615  
Year: 2012  
Keywords: injury evacuation  
Abstract: Injured fireman rescue is an emergent task in firefighting, where a rapid localization plays a significant role. For an indoor fire inside a building, a distributed system, i.e., a sensor network, can be preset surrounding the building for indoor positioning. However, for an accidental wildfire, it is intuitively impossible to preset this kind...  
Contact: dowang@ucalgary.ca  
FRI Access Number: 95499

Title: Carbon and water fluxes from ponderosa pine forests disturbed by wildfire and thinning  
Source: Ecological Applications 20(3):663-83  
Year: 2010  
Keywords: hydrology  
Abstract: Disturbances alter ecosystem carbon dynamics, often by reducing carbon uptake and stocks. We compared the impact of two types of disturbances that represent the most likely future conditions of currently dense ponderosa pine forests of the southwestern United States: (1) high-intensity fire and (2) thinning, designed to reduce fire intensity. High-severity fire had a larger impact on ecosystem carbon uptake and storage than thinning. Total ecosystem carbon was 42% lower at the intensely burned site,...  
Contact: sabina.dore@nau.edu  
FRI Access Number: 96539

Author(s): Dotson, Travis  
Title: The lunch spot  
Year: 2014
Keywords: safety yarnell
FRI Access Number: 96703

Author(s): Dotson, Travis
Title: Ground truths
Year: 2014
Keywords: safety yarnell
FRI Access Number: 96703

Author(s): Dudley, Jonathan G., Victoria A. Saab, Jeffrey P. Hollenbeck
Title: Foraging-Habitat Selection of Black-backed Woodpeckers in Forest Burns of Southwestern Idaho (Seleccion de Habitat de Forrajeo de Picoides arcticus en Sitios Quemados de Bosque en el Sudoeste de Idaho)
Source: The Condor 114(2): 348-35
Year: 2012
Keywords: wildlife birds
Abstract: We examined foraging-habitat selection of Black-backed Woodpeckers (Picoides arcticus) in burned forests of southwestern Idaho during 2000 and 2002 (6 and 8 years following wildfire). This woodpecker responds positively to large-scale fire disturbances and may be at risk from logging and post-fire management. With 100 radio-locations of four adult males, we used resource-selection probability...
Contact: jdudley@fs.fed.us
FRI Access Number: 95362

Author(s): Duran, Jorge, Alexandra Rodriguez, Jose Maria Fernandez-Palacios, Antonio Gallardo
Title: Long-term decrease of organic and inorganic nitrogen concentrations due to pine forest wildfire
Source: Annals of Forest Science 01/2010
Year: 2010
Keywords: soils nutrients
Abstract: Growing concerns about fires and the increase of fire frequency and severity due to climate change have stimulated a large number of scientific papers about fire ecology. Most researchers have focused on the short-term effects of fire, and the knowledge about the long-term consequences of fires on ecosystem nutrient dynamics is still scarce. Our aim was to improve the existing knowledge about the long-term effects of wildfires on forest labile N concentrations. We hypothesized that fires...
Contact:
FRI Access Number: 96437

Author(s): Eastaugh, C. S., H. Vacik
Title: Fire size/frequency modelling as a means of assessing wildfire database reliability
Source: Austrian Journal of Forest Science 129(3-4): 228-247
Current Titles in Wildland Fire, July, 2014

Year: 2012
Keywords: modeling
Abstract: Many jurisdictions around the world have recently begun compiling databases of wildfire records, in an effort to determine patterns, quantify risks and detect possible changes in fire regimes. Such datasets, if valid and comprehensive, could be used for fire hazard model validation, detection of trends and risk modelling under current and future climatic...
FRI Access Number: 95255

Author(s): Eduardo Gonzalez-Ferreiro, Ulises Dieguez-Aranda, Felipe Crecente-Campo, Laura Barreiro-Fernandez, David Miranda and Fernando Castedo-Dorado
Title: Modelling canopy fuel variables for Pinus radiata D. Don in NW Spain with low-density LiDAR data
Year: 2014
Keywords: modeling fuel
Abstract: We evaluated the potential use of very low-density airborne LiDAR data (0.5 first returns m^-2), which is freely available for most of the Spanish territory, to estimate canopy fuel characteristics in Pinus radiata stands in north-western Spain.
Contact: edu.g.ferreiro@gmail.com
FRI Access Number: 96709

Author(s): Elliott, Todd F., Neale L. Bougher, James M. Trappe
Title: Morchella australiana sp. nov., an apparent Australian endemic from New South Wales and Victoria
Source: Mycologia 106(1):113
Year: 2014
Keywords: fungi ecology
Abstract: An abundant fruiting of a black morel was encountered in temperate northwestern New South Wales (NSW), Australia, during a mycological survey in Sep 2010. The site was west of the Great Dividing Range in a young, dry sclerophyll forest dominated by Eucalyptus and Callitris north of Coonabarabran in...
Contact: trappej@onid.orst.edu

Author(s): Ellison, Autumn, Cassandra Moseley, Cody Evers and Max Nielsen-Pincus
Title: Forest Service spending on large wildfires in the West
Source: University of Oregon, Ecosystem Workforce Program, Working Paper 11, 16 pages
Year: 2011
Keywords: economics conflagrations
Contact: cmoseley@uoregon.edu
FRI Access Number: 96742
Current Titles in Wildland Fire, July, 2014

Author(s): Ellsworth, Lisa M.
Title: Improved wildfire management in megathyrsus maximus dominated ecosystems in hawai'i
Source: ph. d. dissertation, university of hawaii, 135 pages
Year: 2011
FRI Access Number: 96691

Author(s): Evers, Louisa B., Miller, Richard F., Doescher, Paul S.
Title: Potential effects of disturbance types and environmental variability on sagebrush-steppe community dynamics
Source: Fire Ecology 9(2): 57-79
Year: 2013
Keywords: ecology
FRI Access Number: 95941

Author(s): Fahey, R. T., D. A. Maurer, M. L. Bowles, J. McBride
Title: Evaluating Restoration Baselines for Historically Fire-Protected Woodlands within a Northeastern Illinois Prairie Peninsula Landscape
Source: Natural Areas Journal
Year: 2014
Keywords: restoration %X The forests and woodlands of the Prairie Peninsula region in the Midwestern USA have been heavily impacted by human influences over the past~ 150 years. Current composition, structure, and dynamics in forest communities across the region lie outside...
Contact: rfahey@mortonarb.org

Author(s): Fennell, Anne-Marie
Title: WILDLAND FIRE MANAGEMENT: Improvements Needed in Information, Collaboration, and Planning to Enhance Federal Fire Aviation Program Success.
Source: GAO Reports, 8/20/2013, preceding p1-51
Year: 2013
Keywords: Aviation aircraft management
FRI Access Number: 96921

Author(s): Fernandes, P. M.
Title: FOREST FUEL MANAGEMENT FOR FIRE MITIGATION UNDER CLIMATE CHANGE
Year: 2013
Keywords: fuel climate
Abstract: Southern Europe has recently experienced dramatic changes in the fire regime because of changes in land use. Further alterations toward more severe fire events are expected with the prospect of a warmer and drier future. Political options privilege fire
suppression, even though land and forest management issues are at the core of the wildfire problem. Fuel management implements...

Contact: pfern@utad.pt
FRI Access Number: 95231

Author(s): FILIPIAK, Pawe and Grzegorz RACKI
Title: Proliferation of abnormal palynoflora during the end-De vonian biotic crisis
Source: Geological Quarterly 54 (1): 1-14
Year: 2010
Keywords: paleohistory ecology
Contact: filipiak@us.edu.pl
FRI Access Number: 96552

Author(s): Filippi, J. B., V. Mallet, B. Nader
Title: Evaluation of forest fire models on a large observation database
Source: Natural hazards Earth systems Science Discussions 2: 3219-3249
Year: 2014
Abstract: This paper presents the evaluation of several fire propagation models using a large set of observed fires. The observation base is composed of 80 Mediterranean fire cases of different sizes, which come with the limited information available in an operational context...
Contact: filippi@univ-corse.fr
FRI Access Number: 96750

Author(s): Flatley, William T., Lafon, Charles W., Grissino-Mayer, Henri D., LaForest, Lisa B.
Title: Fire history, related to climate and land use in three southern Appalachian landscapes in the eastern United States
Source: Ecological applications 23(6): 1250-1266
Year: 2013
Keywords: history ecology climate
Abstract: Fire-maintained ecosystems and associated species are becoming increasingly rare in the southern Appalachian Mountains because of fire suppression policies implemented in the early 20th century. Restoration of these communities through prescribed fire has been hindered by a lack of information on historical fire regimes. To characterize past fire regimes, we collected and absolutely dated the tree rings on cross sections from 242 fire-scarred trees at three different sites in the southern Appalachian Mountains of Tennessee and North Carolina. Our objectives...
Contact: william.flatley@nau.edu
FRI Access Number: 96816

Author(s): Forrestel, E. J., M. J. Donoghue, M. D. Smith
Title: Convergent phylogenetic and functional responses to altered fire regimes in mesic savanna grasslands of North America and South Africa
Source: New Phytologist, available online 2014
Year: 2014
Keywords: ecology
Abstract: The importance of fire in the creation and maintenance of mesic grassland communities is well recognized. Improved understanding of how grasses - the dominant clade in these important ecosystems - will respond to alterations in fire regimes is needed...
Contact: elisabeth.forrestel@yale.edu

Author(s): Fox-Hughes, Paul, Rebecca Harris, Greg Lee, Michael Grose and Nathan Bindoff
Title: Future fire danger climatology for Tasmania, Australia, using a dynamically downscaled regional climate model
Year: 2014
Keywords: climate modeling
Abstract: Daily values of fire danger for Tasmania, Australia, were generated using a regional climate model at ~10-km resolution, for 1961-2100. Regional and seasonal changes in the occurrence of high fire danger were evident over time, and days with pressure patterns associated with high fire danger became more frequent.
Contact: paul.foxhughes@acecrc.org.au
FRI Access Number: 96706

Author(s): Freeborn, P. H., M. A. Cochrane, M. J. Wooster
Title: A Decade Long, Multi-Scale Map Comparison of Fire Regime Parameters Derived from Three Publically Available Satellite-Based Fire Products: A Case Study in the...
Source: Remote Sensing 6: 4061-4089
Year: 2014
Abstract: Although it is assumed that satellite-derived descriptions of fire activity will differ depending on the dataset selected for analysis, as of yet, the effects of failed and false detections at the pixel level and on an instantaneous basis have not been propagated...
Contact: mark.cochrane@sdstate.edu
FRI Access Number: 96908

Author(s): Freeborn, P. H., M. J. Wooster, G. Roberts, W. Xu
Title: Evaluating the SEVIRI Fire Thermal Anomaly Detection Algorithm across the Central African Republic Using the MODIS Active Fire Product
Source: Remote Sensing 6: 1890-1917
Year: 2014
Keywords: remote sensing
Abstract: Satellite-based remote sensing of active fires is the only practical way to consistently and continuously monitor diurnal fluctuations in biomass burning from regional, to continental, to global scales. Failure to understand, quantify, and communicate the...
Contact: patrick.freeborn@sdstate.edu
FRI Access Number: 95912
Current Titles in Wildland Fire, July, 2014

**Author(s):** French, N. H., D. McKenzie, T. A. Erickson  
**Title:** Carbon Emissions from North American Wildland Fires: Development and demonstration of the Wildland Fire Emissions Information System (WFEIS), a tool for scientists and land managers  
**Source:** AGU Fall Meeting Abstracts 12/2010  
**Year:** 2010  
**Keywords:** smoke  
**Abstract:** In the past several years, an impressive amount of activity has been put towards quantifying emissions from wildfire in forests, rangelands, and grasslands for carbon cycle science, a factor considered of little importance only three decades ago until the seminal paper on fire emissions by Seiler and Crutzen was published (Climatic Change vol 2, 1980)...

**Author(s):** Friedel, M., G. E. Allan, A. Duguid  
**Title:** Do we know enough about vegetation dynamics to manage fire regimes in central Australia?  
**Source:** Ecological Management & Restoration  
**Year:** 2014  
**Keywords:** ecology  
**Abstract:** Ecologists have long been concerned that contemporary fire regimes of central Australia have poor consequences for some plant species, vegetation communities and the native animals they support. Fire frequency, size and intensity (the 'fire regime') have all...  
**Contact:** margaret.friedel@csiro.au

**Author(s):** Frizell, Sam  
**Title:** Study: Climate Change to Blame For Worsening U.S. Wildfires  
**Source:** Time.com. 04/22/2014, p1  
**Year:** 2014  
**Keywords:** climate  
**FRI Access Number:** 96812

**Author(s):** Fulton, T. A., C. J. Gilmour, T. J. Hendricks, M. A. Gathany  
**Title:** Evaluating Fire Temperatures During a Prescribed Burn of a Restored Tallgrass Prairie  
**Source:** The research and scholarship symposium, cedarville university, 2104  
**Year:** 2014  
**Keywords:** Temperature prescribed burning restoration grasslands  
**Abstract:** Wildfire is recognized to have shaped the great prairies of the central US. While the vast majority of these grasslands have been lost there remain significant remnants as well as sites under active restoration. Prescribed fire is often used in these systems in order to...  
**Contact:** tfulton@cedarville.edu  
**FRI Access Number:** 96636

**Author(s):** Gabet, E. J.  
**Title:** Fire increases dust production from chaparral soils  
**Source:** Geomorphology, available online, 2014
Current Titles in Wildland Fire, July, 2014

Year: 2014
Keywords: soils ecology
Abstract: By altering the physical and chemical properties of a landscape, fire may increase its vulnerability to erosive processes. Whereas sediment transport by surface runoff after fires has been often investigated, less is known about the role of wind erosion in burned...
Contact: manny.gabet@sjsu.edu
FRI Access Number: 96776

Author(s): Gandiwa, E., P. Zisadza-Gandiwa, D. Goza, C. Mashapa
Title: Diversity and structure of woody vegetation across areas with different soils in Gonarezhou National Park, Zimbabwe
Source: Southern Forests: A Journal, available online 2014
Year: 2014
Keywords: ecology soils
Abstract: ... 2005). Climate, topographic position, soils, large herbivores, fire and anthropogenic influences are important determinants of the woodland composition and structure in savannas (Scholes and Archer 1997; Shackleton 1999; Baxter and Getz 2005; Kiyingi et al. 2010; Mligo et al....
Contact: egandiwa@gmail.com
FRI Access Number: 96913

Author(s): Gandiwa, E.
Title: Impact of fire on woodlands in Gonarezhou National Park, Zimbabwe: Influence of fire frequency on woody vegetation in northern Gonarezhou National Park, Zimbabwe
Year: 2012
Keywords: ecology
Abstract: This study investigates the influence of fire frequency on woody vegetation in northern Gonarezhou National Park (GNP), Zimbabwe. The study first examines the nature of fire frequency patterns in the GNP, their relationship with rainfall and later, the resultant impacts of fires on woodlands. The break point year in the fire occurrence trends in GNP was 1987. There was a strong positive correlation between number of fires and year \( r = 0.79 \) between 1969 and 1987. In contract, between 1987 and 2005, there was a...
Contact: egandiwa@gmail.com

Author(s): Gandiwa, E.
Title: Effects of repeated burning on woody vegetation structure and composition in a semiarid southern African savanna
Year: 2011
Keywords: grasslands frequency ecology
Abstract: The objective of this study was to investigate the effects of repeated dry season annual hot fires on woody plants in a semiarid southern African savanna in Zimbabwe. Parts of the National University of Science and Technology (NUST) research fields in Bulawayo,
Zimbabwe have been burnt annually in the dry season between 1994 and 2003 in order to control bush encroachment. The present study was carried out in both the burnt and unburnt sites of the NUST research fields consisting of Acacia karroo-Colophospermum mopane...

Contact: egandiwa@gmail.com
FRI Access Number: 96915

**Author(s):** Gartner, Joseph E., Susan H. Cannon, Paul M. Santi  
**Title:** Empirical models for predicting volumes of sediment deposited by debris flows and sediment-laden floods in the transverse ranges of southern California  
**Source:** Engineering Geology 176:45  
**Year:** 2014  
**Keywords:** erosion soils  
**Abstract:** We supplement existing data for the volumes of sediment deposited at watershed outlets with newly acquired data to develop new empirical models for predicting volumes of sediment produced by watersheds located in the Transverse Ranges of southern California. The sediment volume data represent a...

Contact: jegartner@noaa.gov

**Author(s):** Garrett, B., L. L. Queen, C. Seielstad  
**Title:** Examining Airborne Infrared Fire Detection Data in the Context of Fire Severity  
**Source:** conference on undergraduate research, poster session  
**Year:** 2014  
**Keywords:** detection remote sensing  
**Abstract:** Application of the LANDSAT-based delta-Normalized Burn Ratio (dNBR) for identifying unburned islands within fire perimeters is a subject of interest to ecologists examining vegetation refuges in burned landscapes. However, questions remain as to...

**Author(s):** Gautam, Shuva  
**Title:** Assessment of fuel quality changes during storage of biofibre and its effect on cost  
**Source:** M. S. Thesis, Lakehead University  
**Year:** 2010  
**Keywords:** fuel economics  
**Year:** Bioenergy, energy produced from renewable biomass, can potentially replace fossil fuels and create employment in northwestern Ontario. However, the procurement of biomass for energy production can be uneconomical due to high moisture content, low thermal value and low energy density. Studies in Europe have shown that biomass can be stored in the field to improve the fuel quality. Logging residues stored in various forms was investigated to gain an understanding of the effect of...

**Author(s):** Gaylord, M. and M. L. Gaylord  
**Title:** Intermountain West Frequent-Fire Forest Restoration  
**Source:** Ecological Restoration Institute, Working Paper 30, 14 pages  
**Year:** 2014  
**Keywords:** restoration insects
**Abstract:** Insects can have a wide-range of both positive and negative effects on forest ecosystems. Positive impacts include serving as pollinators, creating snags for cavity nesting birds and bats, helping to increase forest heterogeneity, and aiding in decomposition and nutrient...

**FRI Access Number:** 96735

**Author(s):** Gedalof, Z.

**Title:** A Conceptual Framework for Fire Ecology in a Changing Climate

**Source:** AGU Fall Meeting Abstracts, 12/2010

**Year:** 2010

**Keywords:** ecology climate

**Abstract:** Climate interacts with forest dynamics and wildfire at a range of spatial and temporal scales. The purpose of this talk is to describe (and ideally discuss) an emerging conceptual model that describes how scale dependent patterns of climatic variability (a top-down control) interact with processes of vegetation development and topography (bottom-up controls)...

**Author(s):** Genming Luo, Yongbiao Wang, Kliti Grice, Steve Kershaw, Thomas J. Algeo, Xiaoyan Ruan, Hao Yang, Chengling Jia, Shucheng Xie

**Title:** Microbial-algal community changes during the latest Permian ecological crisis: Evidence from lipid biomarkers at Cili, South China

**Source:** Global and Planetary Change 105: 36-51

**Year:** 2013

**Keywords:** microbes algae soils

**Abstract:** Microbialites flourished globally immediately following the latest Permian mass extinction. In this study, lipid biomarker records were analyzed in the Cili section (Hunan Province, South China) in order to determine the types of microbes involved in microbialite formation and their response to contemporaneous environmental changes. Various biomarkers were...

**Contact:** xiecug@163.com

**FRI Access Number:** 95168

**Author(s):** Giardina, Christian P.

**Title:** Development of Hawaii and U.S. Affiliated Pacific Island Fire Science Consortium

**Source:** Project ID: 11-4-1-14

**Year:** 2011

**Keywords:** cooperation

**Abstract:** Hawaii and U.S. affiliated islands across the Pacific face an expanding wildfire threat with important impacts on the Earths most threatened biota. Greater than 90% of plants are Island endemics, with nearly 10% of Hawaii native flora extinct or functionally extinct and another 20% rapidly approaching extinction. Hawaii leads the nation in Federally listed Threatened and Endangered plant... %o no report is available
Current Titles in Wildland Fire, July, 2014

Author(s): Gibson, Nancy J., Jim Tomaselli, Ralph Gonzales and Godot Apuzzo  
**Title:** Little Fire shelter use  
**Source:** San Bernardino Natinal forest Facilitated Learning Analysis, USDA Forest Service, San Bernardino National Forest, San Jacinto Ranger District, Idyllwild, California, 21 pages  
**Year:** 2014  
**Keywords:** shelter safety equipment  
**FRI Access Number:** 96701

Author(s): Gierga, Merle, Maximilian P.W. Schneider, Daniel B. Wiedemeier, Susan Q. Lang, Rienk H. Smittenberg, Irka Hajdas, Stefano M. Bernasconi, Michael W.I. Schmidt  
**Title:** Purification of fire derived markers for g scale isotope analysis (k13C, 14C) using high performance liquid chromatography (HPLC)  
**Source:** Organic Geochemistry 01/2014;  
**Year:** 2014  
**Keywords:** paleohistory  
**Abstract:** Black carbon (BC) is the residue of incomplete biomass combustion. It is ubiquitous in nature and, due to its relative persistence, is an important factor in Earth’s slow-cycling carbon pool. This resistant nature makes pure BC one of the most used...  
**Contact:** merle.gierga@ethz.ch  
**FRI Access Number:** 95894

Author(s): Gilbert, S. W.  
**Title:** Estimating Long-Term Fire Probabilities for San Diego County, CA  
**Source:** Draft manuscript, 37 pages  
**Year:** 2014  
**Keywords:** danger risk  
**FRI Access Number:** 96738

Author(s): Goodwin, N. R., L. J. Collett  
**Title:** Development of an automated method for mapping fire history captured in Landsat TM and ETM+ time series across Queensland, Australia  
**Source:** Remote Sensing of Environment 148: 206-221  
**Year:** 2014  
**Keywords:** remote sensing history  
**Abstract:** Remote sensing can quantify past and present fire activity at spatial scales useful for a range of fire and vegetation management applications. In this study, we present a new automated approach to classifying burnt areas across the state of Queensland, Australia...  
**Contact:** nicholas.goodwin@science.dsitia.qld.gov.au  
**FRI Access Number:** 96877

Author(s): Goodner, C. and M. Walsh  
**Title:** Vegetation classification and fire activity in the Blue Mountains of Oregon  
**Source:** poster presentation, SURC Ballroom  
**Year:** 2014
Keywords: ecology statistics history
Abstract: In order to help select study sites in the Blue Mountains of Oregon to be used for post-glacial paleofire reconstructions, we used ERDAS Imagine to map the current vegetation cover types of the region. Additionally, ESRI ArcGIS was used to show how the...

Author(s): Gordon, Jason S., Richard C. Stedman, A. E. Luloff
Title: West Virginia Wildland Fire as Latent Social Discontent
Source: Society and Natural Resources 23(12): 1230-1243
Year: 2010
Keywords: interface
Abstract: This research explores community perceptions of wildland fire risk in two fire-prone West Virginia counties. We employed community field theory and key informant interviews to observe how the local context, including sociocultural heritage, influenced risk perceptions, and meanings of fire. In contrast with expert risk assessments, residents did...
FRI Access Number: 95662

Author(s): Gosper, Carl R., Colin J. Yates, Suzanne M. Prober and Georg Wiehl
Title: Application and validation of visual fuel hazard assessments in dry Mediterranean-climate woodlands
Source: International Journal of Wildland Fire 23: 385-393
Year: 2014
Keywords: climate
Abstract: Visual fuel assessments can be used to parameterise fire behaviour models. Vesta visual fuel assessments in eucalypt woodlands were strongly correlated with quantitative measurements, indicating that visual assessments adequately captured time-since-fire changes in fuel. Issues limiting the wider application of the Vesta methodology were mainly associated with differences between communities in their responses to fire.
Contact: carl.gosper@dpaw.wa.gov.au
FRI Access Number: 96711

Author(s): Gouverneur, B., S. Verstockt, E. Pauwels, J. Han, P. M. De Zeeuw, J. Vermeiren
Title: Archeological Treasures Protection based on early Forest Wildfire Multi Band Imaging Detection System
Year: 2012
Keywords: Archeology
Abstract: Various visible and infrared cameras have been tested for the early detection of wildfires to protect archeological treasures. This analysis was possible thanks to the EU Firesense project (FP7-244088). Although visible cameras are low cost and give good...
Contact: Benedict.gouverneur@xenics.com
FRI Access Number: 95242
Author(s): Grishin, A. M., A. I. Filkov, E. L Loboda, V. V. Reyno, A. V. Kozlov, V. T. Kuznetsov, D. P. Kasymov, S. M. Andreyuk, A. I. Ivanov and N. D. Stolyarchuk
Title: A field experiment on grass fire effects on wooden constructions and peat layer ignition
Year: 2014
Keywords: ignition grass
Abstract: The results of a field experiment for grass fire propagation and the effects on wooden constructions and peat layers are provided. Fire characteristics and conditions for wooden construction ignition are investigated. Practical recommendations are given to minimise the probability of grass fires spreading to wooden constructions.
Contact: aifilkov@gmail.com
FRI Access Number: 96719

Author(s): Habiboglu, Yusuf Hakan, Osman Gunay, and A. Enis Cetin
Title: Real-Time Wildfire Detection Using Correlation Descriptors
Source: 19th European Signal Processing Conference (EUSIPCO2011), Special Session on Signal processing for disaster management and prevention, 29 August - 2 September 2011, Barcelona, Spain
Year: 2011
Keywords: detection
Abstract: A video based wildfire detection system that based on spatio-temporal correlation descriptors is developed. During the initial stages of wildfires smoke plume becomes visible before the flames. The proposed method...
Contact: yhakan@ee.bilkent.edu.tr
FRI Access Number: 95198

Author(s): Hall, Michael
Title: The Effects of Prescribed Burns on Oak (Quercus spp.) and Red Maple (Acer rubrum) Stump Sprouts in Southeastern Ohio
Source: The Ohio State University. School of Environment and Natural Resources Honors Theses; 2011
Year: 2011
Keywords: ecology prescribed burning
Abstract: Oak (Quercus spp.) regeneration within Ohio's forests is a current concern for land managers. The sprouts of oak are being lost during the stem-exclusion stage of forest succession...
FRI Access Number: 96644

Author(s): Hartkopf-Froder, Christoph, Jes Rust, Torsten Wappler, Else Marie Friis, Agnes Viehofen
Title: Mid-Cretaceous charred fossil flowers reveal direct observation of arthropod feeding strategies
Source: Biology letters 8(2):295-8
Abstract: Although plant-arthropod relationships underpin the dramatic rise in diversity and ecological dominance of flowering plants and their associated arthropods, direct observations of such interactions in the fossil record are rare, as these ephemeral moments are difficult to preserve. Three-dimensionally preserved charred remains of Chloranthistemon flowers...

Contact: harto@froeder@gd.nrw.de

FRI Access Number: 95433


Title: The Role of Wildfire in the Export of Particulate Organic Carbon from a Small Mountainous River

Source: AGU Fall Meeting Abstracts 12/2011

Year: 2011

Keywords: smoke

Abstract: The delivery of particulate organic carbon (POC) from rivers to marine sediments is the major long-term sink of CO2 on Earth and a net source of oxygen over millennial time scales. Small mountainous river systems may be responsible for half of the POC delivery to global oceans. The flux of POC in SMRS has been thought to be regulated by hydrogeomorphic factors, such as runoff, tectonic uplift rates, and bedrock geology. To date, the role of landscape...

FRI Access Number: 95247

Author(s): Haynes, K., Handmer J., McAneney J., Tibbits A., Coates L.

Title: Australian bushfire fatalities 1900-2008: exploring trends in relation to the Prepare, stay and defend or leave early-policy

Source: Environmental Science & Policy 13, 185-194

Year: 2010

Keywords: fatalities australia

Contact: Katharine.haynes@rmit.edu.au

FRI Access Number: 96819

Author(s): Heckman, Katherine, Campbell, John, Powers, Heath H., Law, Beverly E., Swanston, Christopher W.

Title: The influence of fire on the radiocarbon signature and character of soil organic matter in the Siskiyou National Forest, Oregon, USA

Source: Fire Ecology 9(2): 40-56

Year: 2013

Keywords: soils

FRI Access Number: 95942
Current Titles in Wildland Fire, July, 2014

Title: Inflammatory effects of woodsmoke exposure among wildland firefighters working at prescribed burns at the Savannah River Site, SC
Source: Journal of occupational and environmental hygiene 10(4): 173-180
Year: 2013
Keywords: smoke health prescribed burning

Author(s): Herring, E. M., R. S. Anderson, G. L. San Miguel
Title: Fire, vegetation, and Ancestral Puebloans: A sediment record from Prater Canyon in Mesa Verde National Park, Colorado, USA
Source: The Holocene
Year: 2014
Keywords: paleohistory
Abstract: Continuous sediment, charcoal, and pollen records were developed from a~ 7-m sediment core from Prater Canyon in Mesa Verde National Park (MEVE), Colorado, USA. Sediment input into the canyon is episodic and is linked to precipitation runoff and... Contact: eherring@uoregon.edu

Author(s): Herrero-Corral, Gema, Marielle Jappiot, Christophe Bouillon, Marl ne Long-Fournel
Title: Application of a geographical assessment method for the characterization of wildland-urban interfaces in the context of wildfire prevention: A case study in western Madrid
Source: Applied Geography 35: 60-70
Year: 2012
Keywords: interface prevention
Abstract: The increasing occurrence of fires in areas where wildlands and urban structures meet (wildland-urban interface areas, WUIs) is currently of great concern to policy makers in Euro-Mediterranean countries. A better understanding of these areas is crucial for efficient fire management. This paper presents a method to map... Contact: gemaheco@gmail.com
FRI Access Number: 95274

Author(s): Hiers, J. Kevin, Jeffrey R. Walters, Robert J. Mitchell
Title: Ecological Value of Retaining Pyrophytic Oaks in Longleaf Pine Ecosystems
Year: 2014
Keywords: ecology
Abstract: Species intolerant to fire, defined as lacking adaptations needed to establish dominance in a frequently burned landscape, are found within fire-prone ecosystems globally. Such species are frequently targeted for reduction or eradication to further conservation or restoration of biological diversity because the dominant paradigm in restoration of fire-dependent communities is to reduce the dominance or eliminate fire-intolerant invaders. To explore this paradigm, we examined the role... Contact: mconner@jonesctr.org
Current Titles in Wildland Fire, July, 2014

FRI Access Number: 96242

Author(s): Hipke, Eric  
**Title:** His lunch spot story - and his vital insights  
**Source:** Two More Chains 4(1): 7-9  
**Year:** 2014  
**Keywords:** safety south canyon  
FRI Access Number: 96703

Author(s): Holcomb, Elizabeth, Keyser, Patrick, Harper, Craig  
**Title:** Responses of Planted Native Warm-season Grasses and Associated Vegetation to Seasonality of Fire in the Southeastern US  
**Source:** Southeastern Naturalist 13(2): 221-23  
**Year:** 2014  
**Keywords:** ecology season grasslands  
Contact: charper@utk.edu  
FRI Access Number: 96925

Author(s): Holden, Zachary A., Charles H. Luce, Michael A. Crimmins, Penelope Morgan  
**Title:** Wildfire extent and severity correlated with annual streamflow distribution and timing in the Pacific Northwest, USA (1984-2005)  
**Source:** Ecohydrology 5(5): 677-684  
**Year:** 2012  
**Keywords:** severity hydrology  
Abstract: Climate change effects on wildfire occurrence have been attributed primarily to increases in temperatures causing earlier snowpack ablation and longer fire seasons. Variability in precipitation is also an important control on snowpack accumulation and, therefore, on timing of meltwater inputs. We evaluate the correlation of total area burned and area burned severely to snowmelt-induced streamflow timing and total annual streamflow metrics across...  
Contact: zaholden@fs.fed.us  
FRI Access Number: 95244

Author(s): Hosseini, Mohammad, Oscar Gonzalez-Pelayo, Ben Buchspies, Paula Maia, Martinho Martins, Daniela Varandas, Violette Geissen, Celeste Coelho, Coen Ritsem, Jan Jacob Keizer  
**Title:** Post-fire runoff and soil (fertility) losses in long-unburnt vs. repeatedly-burnt Maritime Pine stands, north-central Portugal  
**Source:** Geophysical Research Abstracts15, EGU2013-13301, 2013  
**Year:** 2013  
**Keywords:** erosion soils  
Abstract: Whilst wildfires are a natural phenomenon in Mediterranean climate regions and a key evolutionary and ecological factor in several of its ecosystems, there are widespread
Current Titles in Wildland Fire, July, 2014

Concerns about the resilience of even these fire-adapted ecosystems under present-day fire regimes. The role of repeated wildfires in land degradation, however,...

**Contact:** jjkeizer@ua.pt

**FRI Access Number:** 95947

**Author(s):** Hungate, B. A., F. P. Day, P. Dijkstra, B. D. Duval, C. R. Hinkle J. Adam Langley, J. Patrick Megonigal, Peter Stiling, Dale W. Johnson and Bert G. Drake

**Title:** Fire, hurricane and carbon dioxide: effects on net primary production of a subtropical woodland

**Source:** New Phytologist, available online, 2013

**Year:** 2013

**Keywords:** climate

**Abstract:** scrub-oak vegetation regenerating from fire disturbance in subtropical Florida was exposed to experimentally elevated carbon dioxide (CO$_2$) concentration (+350 l l$^{-1}$) using open-top chambers for 11 yr, punctuated by hurricane disturbance in year 8. Here, we report the...

**Contact:** Bruce.Hungate@nau.edu

**FRI Access Number:** 96114

**Author(s):** Hurteau, M. D., J. B. Bradford, P. Z. Fule, A. H. Taylor

**Title:** Climate change, fire management, and ecological services in the southwestern US

**Source:** Forest Ecology and Management, available online, 2013

**Year:** 2013

**Keywords:** climate ecology

**Abstract:** The diverse forest types of the southwestern US are inseparable from fire. Across climate zones in California, Nevada, Arizona, and New Mexico, fire suppression has left many forest types out of sync with their historic fire regimes. As a result, high fuel loads...

**Contact:** matthew.hurteau@psu.edu

**FRI Access Number:** 94749

**Author(s):** Hyohyemi Lee, Josu G Alday, Rob J Rose, John O'Reilly, Rob H Marrs

**Title:** Long-term effects of rotational prescribed burning and low-intensity sheep grazing on blanket-bog plant communities

**Source:** Journal of Applied Ecology 50(3): 625-635

**Year:** 2013

**Keywords:** prescribed burning grazing agriculture

**Abstract:** The importance of peatlands is being increasingly recognized internationally for both the conservation of biodiversity and the provision of ecosystem services; strategies are being developed world-wide to help maintain their integrity. Prescribed burning has been highlighted as a threat with considerable debate over its use as it is perceived to produce a Calluna vulgaris monoculture and a decline in preferred peat-forming species...

**Contact:** calluna@liv.ac.uk

**FRI Access Number:** 95225
**Current Titles in Wildland Fire, July, 2014**

**Author(s):** Isik, Sinan, M. Yunus Donmez, Can Tunca, and Cem Ersoy  
**Title:** A Simulation Platform for Realistic Performance Evaluation of Wireless Sensor Networks to Detect Forest Fires  
**Source:** Akademik Bilisim Konferansi 2013 (AB2013), Antalya, Turkey, 23-25 January 2013  
**Year:** 2013  
**Keywords:** detection  
**Abstract:** Forest fires lead to high amount of environmental and economic loss all over the world. Prevention and early detection efforts aim to eliminate or minimize the damage that will be caused by a fire incident. Current surveillance systems for forest fires do not provide dense real-time monitoring and hence they lack prevention...  
**Contact:** isiksboun.edu.tr  
**FRI Access Number:** 95201

**Author(s):** Ivanova, G. A., S. G. Conard, D. J. McRae, E. A. Kukavskaya, A. V. Bogorodskaya, N. M. Kovaleva  
**Title:** Carbon Emission from Forest Fires on Scots Pine Logging Sites in the Angara Region of Central Siberia  
**Source:** AGU Fall Meeting Abstracts 12/2010  
**Year:** 2010  
**Keywords:** smoke  
**Abstract:** Wildfire and large-scale forest harvesting are the two major disturbances in the Russian boreal forests. Non-recovered logged sites total about a million hectares in Siberia. Logged sites are characterized by higher fire hazard than forest sites due to the presence of generally untreated logging slash (i.e., available fuel) which dries out much more rapidly...

**Author(s):** Iwata, H., Y. Harazono, C. Iwama, M. Ueyama  
**Title:** Seasonal Variation in Fraction of Absorbed Photosynthetically Active Radiation and Vegetation Properties in Burned Forests in Interior Alaska  
**Source:** AGU Fall Meeting Abstracts 12/2011  
**Year:** 2011  
**Keywords:** ecology  
**Abstract:** Wildfire is a major disturbance in boreal forest ecosystems, and it significantly influences carbon exchange processes. It is important to explicitly incorporate burned areas in estimating regional carbon dioxide (CO2) exchange. A simple approach to quantify regional CO2 exchange is an application of a light-use efficiency model with satellite data. The model calculates CO2 uptake from light-use efficiency and absorbed photosynthetically active radiation...  
**Contact:** hiwata@kais.kyoto-u.ac.jp  
**FRI Access Number:** 95253

**Author(s):** Jakovcevic, Toni, Maja Braovic, Darko Stipanicev, Damir Krstinic  
**Title:** Review of wildfire smoke detection techniques based on visible spectrum video analysis  
**Source:** International Journal of Remote Sensing 33(12): 3653-3671
**Current Titles in Wildland Fire, July, 2014**

**Year:** 2012  
**Keywords:** remote sensing smoke  
**Abstract:** Wildfires or wildland fires are any uncontrolled burning of natural vegetation in the wilderness area. Wildfires can be natural or man caused disasters and they represent a constant threat to ecological systems, infrastructure and human lives. Apart from preventive measures, early fire detection and quick and appropriate intervention are of primary importance for wildfire damage minimization. Wildfire detection was traditionally based on human wildfire surveillance from lookout towers, but modern information communication technology (ICT) offers...  
**Contact:** toni.jakovcevic@fesb.hr  
**FRI Access Number:** 95627

**Author(s):** Jakubowski, Marek, Qinghua Guo, Brandon Collins, Scott Stephens, Maggi Kelly  
**Title:** Prediction of fuel models and stand structure metrics using lidar and optical remote sensing in dense mixed conifer forest  
**Source:** Photogrammetric Engineering and Remote Sensing 79(1): 37-49  
**Year:** 2013  
**Keywords:** remote sensing  
**Abstract:** We compared the ability of several classification and regression algorithms to predict forest stand structure metrics and standard surface fuel models. Our study area spans a dense, topographically complex Sierra Nevada mixed-conifer forest. We used clustering, regression trees, and support vector machine  
**Contact:** marek@berkeley.edu  
**FRI Access Number:** 95192

**Author(s):** James, Jeremy J. and Tony Svejcar  
**Title:** Limitations to Postfire Seedling Establishment: The Role of Seeding Technology, Water Availability, and Invasive Plant Abundance  
**Source:** Rangeland Ecology & Management 01/2010  
**Year:** 2010  
**Keywords:** regeneration ecology  
**Abstract:** Seeding rangeland following wildfire is a central tool managers use to stabilize soils and inhibit the spread of invasive plants. Rates of successful seeding on arid rangeland, however, are low. The objective of this study was to determine the degree to which water availability, invasive plant abundance, and seeding technology influence postfire seedling establishment. Across four fire complexes, whole plots were either seeded using a rangeland drill, seeded by hand where seeds could be placed at an exact depth, or left as unseeded controls. Irrigation and weeding treatments were applied to subplots within whole plots in an incomplete factorial design. In three of the four fires, seeding method was the single factor limiting establishment with seedling density over sevenfold higher in the hand-seeded compared to the drill-seeded treatments. In contrast to our hypotheses, water and weeding had no positive effect on seedling establishment in any of the four fires; however, background weed density was...  
**Contact:** jeremy.james@oregonstate.edu
**Current Titles in Wildland Fire, July, 2014**

**Author(s):** Jara, Ignacio A., Patricio I. Moreno  
**Title:** Climatic and disturbance influences on the temperate rainforests of northwestern Patagonia (40°S) since 14,500 calyrBP  
**Source:** Quaternary Science Reviews 90: 217-228  
**Year:** 2014  
**Keywords:** paleohistory  
**Abstract:** We present a detailed record from Lago Pichilafquen to unravel the vegetation, climate and disturbance history of the lowlands of northwestern Patagonia (40°S) since 14,500calyrBP. The presence of 30 tephras throughout the record attest for the proximity of the site to active volcanic centres and allows assessment of the role of volcanic disturbance on past vegetation and fire regime shifts...  
**Contact:** ignacio.jaraparra@vuw.ac.nz

**FRI Access Number:** 96808

**Author(s):** Jenkins, Michael J., Hebertson, Elizabeth G., Page, Wesley G., and Lindquist, Wanda E.  
**Title:** Resources for Managing the Impact of Bark Beetle Activity on Conifer Fuels and Fire Behavior  
**Source:** The Bark Beetles, Fuels, and Fire Bibliography. Paper 209  
**Year:** 2011  
**Keywords:** insects  

**FRI Access Number:** 96631

**Author(s):** Jhariya, M. K., S. S. Bargali, S. L. Swamy, B. Kittur, K. Bargali  
**Title:** Impact of Forest Fire on Biomass and Carbon Storage Pattern of Tropical Deciduous Forests in Bhoramdeo Wildlife Sanctuary, Chhattisgarh  
**Source:** International Journal of Ecology and Environmental Sciences 40(1):  
**Year:** 2014  
**Keywords:** ecology  
**Abstract:** In developing countries, protected forests experience extensive anthropogenic disturbance due to fire, grazing, extraction of fuel wood and collection of non-wood forest products which contribute to the livelihood of forest dwelling populations. The present...

**Author(s):** Johnston, J. M., M. J. Wooster, T. J. Lynham  
**Title:** Experimental confirmation of the MWIR and LWIR grey body assumption for vegetation fire flame emissivity  
**Source:** International Journal of Wildland Fire  
**Year:** 2014  
**Keywords:** behavior physics  
**Abstract:** The temperature and emissivity of forest fire flames play a key role in understanding fire behaviour, modelling fire spread and calculating fire parameters by means of active fire thermal remote sensing. Essential to many of these is the often-made assumption that...
Current Titles in Wildland Fire, July, 2014

Author(s): Johnson, R. H., R. S. Schumacher, J. H. Ruppert Jr
Title: The Role of Convective Outflow in the Waldo Canyon Fire
Source: Monthly Weather Review, available online 2014
Year: 2014
Keywords: behavior weather
Abstract: The meteorological conditions associated with the rapid intensification and spread of the catastrophic Waldo Canyon Fire on 26 June 2012 are studied. The fire caused two fatalities, destroyed 347 homes in Colorado Springs, and resulted in insurance losses of...
Contact: johnson@atmos.colostate.edu

Author(s): Jones, E. B.
Title: No Smoke Without Fire: Moor Burning, the Environment, and Social Reform in the German Empire, 1866-1914
Source: Agricultural History 88(2): 207-236
Year: 2014
Keywords: prescribed burning smoke
Abstract: This article traces the mounting worries about peat (moor) smoke in northwest Germany and how they fueled a state-led effort to find a reliable alternative to moor burning. Public complaints about moor smoke's threats began in the eighteenth century and peaked after ...

Author(s): Jorgenson, C. A. and M. J. Jenkins
Title: Fuel Complex Alterations Associated with Spruce Beetle-Induced Tree Mortality in Intermountain Spruce-Fir Forests, USA
Source: For. Sci. 56:In press
Year: 2010
Keywords: fuel insects
FRI Access Number: 96632

Author(s): Kahn, R. A., B. J. Gaitley, M. J. Garay, D. J. Diner, T. F. Eck, A. Smirnov, and B. N. Holben
Title: Multiangle Imaging SpectroRadiometer global aerosol product assessment by comparison with the Aerosol Robotic Network
Year: 2010
Keywords: detection
Contact: ralph.kahn@nasa.gov
FRI Access Number: 95194

Author(s): Kahn, Ralph
Title: What We Can Say from MISR about Aerosol Optical Depth, Aerosol Type, and Plume Height
Current Titles in Wildland Fire, July, 2014

Year: 2013
Keywords: smoke
Abstract: As the time-series of observations from the NASA Earth Observing System's Multi-angle Imaging SpectroRadiometer (MISR) instrument has grown to about 13 years, the value of these data for global and regional studies has increased immensely. The record of coincident, suborbital validation data has also increased steadily, making it possible...
Contact: ralph.kahn@nasa.gov
FRI Access Number: 95195

Author(s): Kavouras, Ilias G., George Nikolich, Vic Etyemezian, David W. Dubois, James King, David Shafer
Title: In situ observations of soil minerals and organic matter in the early phases of prescribed fires
Source: Journal of Geophysical Research 01/2012; 117(D12313).
Year: 2012
Keywords: soils
Abstract: We examined the chemical composition of aerosol samples collected during a prescribed fire at a Great Basin Desert site in the context of samples collected from controlled combustion of vegetation clippings from the same site and resuspension of soil samples obtained...
Contact: ikavouras@uams.edu
FRI Access Number: 96849

Author(s): Kerns, Becky K.
Title: Management Options to Control Exotic Invasive Plant Species in Association with Fuel Reduction Treatments in a Wildland Urban Interface, Crooked River National Grassland
Source: Final Report, Joint Fire Science ProgramJFSP Project ID: 05-2-1-05
Year: 2014
Keywords: exotics
Contact: bkerns@fs.fed.us %o fire research institute, pdf number 96575

Author(s): Kettridge, N., D. K. Thompson, J. M. Waddington
Title: Impact of wildfire on the thermal behavior of northern peatlands: Observations and model simulations
Source: Journal of Geophysical Research 01/2012; 117
Year: 2012
Keywords: soils
Abstract: Wildfire represents the single largest disturbance to the ecohydrological function of northern peatlands. Alterations to peatland thermal behavior as a result of wildfire will modify the carbon balance of these important long-term global carbon stores and regulate post-fire ecosystem recovery. We simulate the 3-D thermal behavior...
Contact: n.kettridge@bham.ac.uk
FRI Access Number: 95170
Author(s): Khelloufi, K., Y. Baara, N. Zekri
Title: Modeling of radiative heat transfer from a solid cylindrical flame and mass transfer in forest fire network
Source: IPCO-2014 2: 5 pages
Year: 2014
Keywords: behavior
Abstract: The dynamics on the non-equilibrium propagation in a two-dimensional network modeling wildfire propagation was studied. The model includes deterministic long-range interactions due to radiation and a time weighting procedure and a probabilistic long-range...
Contact: ph_khadij@hotmail.fr
FRI Access Number: 96906

Author(s): Kim, D. and M. A. Arthur
Title: Changes in community structure and species-landform relationship after repeated fire disturbance in an oak-dominated temperate forest
Source: Ecological Research
Year: 2014
Keywords: ecology frequency
Abstract: Landform has long been considered one of the primary controls on forest community structure; however, it is still unclear how the strength of such species-topography couplings varies in response to recurring disturbance events. We evaluated this question...
Contact: biogeokim@uky.edu
FRI Access Number: 96778

Author(s): Kinoshita, A. M., T. S. Hogue
Title: Integrating MODIS-based products to improve post-fire recovery predictions for burned watersheds in Southern California
Source: AGU Fall Meeting Abstracts 12/2010;
Year: 2010
Keywords: remote sensing
Abstract: Wildfires in Southern California are natural and frequent events that result in dramatic land cover changes, affecting land-atmosphere interactions and hydrologic behavior. Changing climate and land use patterns (community expansion into fire-prone areas) contribute to shifts in natural fire regimes and increase pressure on policymakers...

Author(s): Knorr, W., T. Kaminski, A. Arneth, U. Weber
Title: Impact of human population density on fire frequency at the global scale
Source: Biogeosciences
Year: 2014
Keywords: interface frequency
Abstract: Human impact on wildfires, a major earth system component, remains poorly understood. While local studies have found more fires close to settlements and roads, assimilated charcoal records and analyses of regional fire patterns from remote-sensing...

Contact: wolfgang.knorr@nateku.lu.se
FRI Access Number: 95913

Author(s): Kolden, C. A., and J. Rogan
Title: Mapping wildfire burn severity in the Arctic tundra: novel approaches for an extreme environment
Source: Arctic, Antarctic and Alpine Research 45(1): 64-76
Year: 2013
Keywords: severity
Contact: ckolden@uidaho.edu
FRI Access Number: 94988

Author(s): Kolden, C. A., J. T. Abatzoglou
Title: Climate and Vegetation Influences on Fire Impacts in Alaskan Boreal Forest: Implications for Carbon and Fire Management
Source: Fire Ecology 8(1): 98-113
Year: 2012
Keywords: ecology climate
Contact: ckolden@uidaho.edu
FRI Access Number: 94992

Title: Wildfire monitoring via the integration of remote sensing with innovative information technologies
Source: Unknown source
Year: 2012
Keywords: remote sensing
Abstract: In the Institute for Space Applications and Remote Sensing of the National Observatory of Athens (ISARS/NOA) volumes of Earth Observation images of different spectral and spatial resolutions are being processed on a systematic basis to derive thematic products that cover a wide spectrum of applications during and after wildfire crisis, from fire...
FRI Access Number: 95329

Author(s): Koutsias, N., P. Balatsos, K. Kalabokidis
Title: Fire occurrence zones: kernel density estimation of historical wildfire ignitions at the national level, Greece
Source: Journal of Maps, available online, 2014
Year: 2014
Keywords: statistics ignitions
Current Titles in Wildland Fire, July, 2014

Abstract: The focus of our study was to create a Main Map of fire occurrence zones from historical wildland fire ignition observations at national level in Greece using a Kernel Density estimation procedure. Kernel density estimation, a non parametric statistical method for...
Contact: nkoutsia@cc.uoi.gr

Author(s): Krenn, Roland, Stefan Hergarten
Title: Simulating the effect of ignition source type on forest fire statistics
Source: EGU General Assembly 2010, held 2-7 May, 2010 in Vienna, Austria, p.11481
Year: 2010
Keywords: statistics cause
Abstract: Forest fires belong to the most frightening natural hazards, and have long-term ecological and economic effects on the regions involved. It was found that their frequency-area distributions show power-law behaviour under a wide variety of conditions, interpreting them as a self-organised critical phenomenon. Using computer simulations...
Contact: roland.krenn@uni-graz.at
FRI Access Number: 96629

Author(s): Kulakowski, Dominik, Jarvis, Daniel, Veblen, Thomas T, Smith, Jeremy
Title: Stand-replacing fires reduce susceptibility of lodgepole pine to mountain pine beetle outbreaks in Colorado
Source: Journal of Biogeography 39(11): 2052-2060
Year: 2012
Keywords: ecology insects
Abstract: Aim As climate change is increasing the frequency, severity and extent of wildfire and bark beetle outbreaks, it is important to understand how these disturbances interact to affect ecological patterns and processes, including susceptibility to subsequent disturbances. Stand-replacing fires and outbreaks of mountain pine beetle (MPB), Dendroctonus ponderosae, are both important disturbances in the lodgepole pine, Pinus contorta, forests of the Rocky...
Contact: dkulakowski@clarku.edu
FRI Access Number: 95241

Author(s): Labati, R. D., A. Genovese, V. Piuri, F. Scotti
Title: Wildfire Smoke Detection Using Computational Intelligence Techniques Enhanced With Synthetic Smoke Plume Generation
Year: 2013
Keywords: smoke detection
Abstract: An early wildfire detection is essential in order to assess an effective response to emergencies and damages. In this paper, we propose a low cost approach based on image processing and computational intelligence techniques, capable to adapt and identify wildfire smoke from heterogeneous sequences taken...
Contact: ruggero.donida@unimi.it
FRI Access Number: 95169
Author(s): Lannom, Karen O., Wade T. Tinkham, Alistair M. S. Smith, John Abatzoglou, Beth A. Newingham, Troy E. Hall, Penelope Morgan, Eva K. Strand, Travis B. Paveglio, John W. Anderson and Aaron M. Sparks

**Title:** Defining extreme wildland fires using geospatial and ancillary metrics

**Source:** International Journal of Wildland Fire 23: 322-337

**Year:** 2014

**Keywords:** behavior

**Abstract:** This study explores four metrics to describe both widespread fire years and potentially extreme individual fires derived from a case study of wildland fires from 1984 to 2009 in the north-western United States. A combination of percentile-based thresholds is used for each of the metrics to define individual fires as extreme events.

**Contact:** alistair@uidaho.edu

**FRI Access Number:** 96707

---

Author(s): Larson, D.

**Title:** THE INFLUENCE OF FIRE AND GRAZING ON TALLGRASS PRAIRIE STREAMS AND HERPETOFAUNA

**Year:** 2014

**Source:** Ph. D. Dissertation, Kansas State University, 191 pages

**Year:** 2014

**Keywords:** grasslands ecology wetlands wildlife herpetofauna

**Abstract:** Tallgrass prairie evolved with fire-grazer interactions. Fire and grazing are vital processes for maintaining grasslands and cattle production, and therefore will be continued as land management schemes. The effects of fire and grazers on prairie streams are understudied...

**FRI Access Number:** 96646

---

Author(s): Lecina-Diaz, J., A. Alvarez, J. Retana

**Title:** Extreme Fire Severity Patterns in Topographic, Convective and Wind-Driven Historical Wildfires of Mediterranean Pine Forests

**Source:** PLOS ONE, January 22, 2014, DOI: 10.1371/journal.pone.0085127

**Year:** 2014

**Keywords:** severity behavior

**Abstract:** Crown fires associated with extreme fire severity are extremely difficult to control. We have assessed fire severity using differenced Normalized Burn Ratio (dNBR) from Landsat imagery in 15 historical wildfires of Pinus halepensis Mill. We have considered a...

**Contact:** j.lecina@creaf.uab.es

**FRI Access Number:** 95207

---

Author(s): Leduc, Stephen D., Erik A Lilleskov, Thomas R. Horton, David E. Rothstein
Title: Ectomycorrhizal fungal succession coincides with shifts in organic nitrogen availability and canopy closure in post-wildfire jack pine forests  
Source: Oecologia 10/2012  
Year: 2012  
Keywords: fungi ecology soils  
Abstract: Successional changes in belowground ectomycorrhizal fungal (EMF) communities have been observed with increasing forest stand age; however, mechanisms behind this change remain unclear. It has been hypothesized that declines of inorganic nitrogen (N) and increases of organic N influence changes in EMF taxa over forest development. In a post-wildfire chronosequence of six jack pine (Pinus banksiana) stands ranging in age from 5...  
Contact: dimitrop@iti.gr  
FRI Access Number: 95246

Author(s): Lehtonen, I., K. Ruosteenoja, A. Venalainen, H. Gregow  
Title: The projected 21st century forest-fire risk in Finland under different greenhouse gas scenarios  
Source: Boreal environment research 19: 127-139  
Year: 2014  
Keywords: risk finland  
Abstract: We evaluated forest fire potential at four locations in Finland in the current climate and in projected future climates under the B1, A1B and A2 greenhouse-gas (GHG) emission scenarios. In evaluating the forest fire danger potential, the Canadian fire weather index...  
FRI Access Number: 96734

Author(s): Lei Fang, Jian Yang  
Title: Atmospheric effects on the performance and threshold extrapolation of multi-temporal Landsat derived dNBR for burn severity assessment  
Source: International Journal of Applied Earth Observation and Geoinformation 33: 10-20  
Year: 2014  
Keywords: remote sensing  
Abstract: The Landsat derived differenced Normalized Burn Ratio (dNBR) is widely used for burn severity assessments. Studies of regional wildfire trends in response to climate change require consistency in dNBR mapping across multiple image dates, which may vary in atmospheric condition. Conversion of continuous dNBR images into categorical burn severity maps...  
Contact: yangjian@iae.ac.cn  
FRI Access Number: 96899

Author(s): Lemesios, G., A. Karali, C. Papadaskalopoulou, S. Pitsari, D. Malamis, K. Ioannou, M. Zachariou-Dodou, C. Giannakopoulos, M. Petrakis, M. Loizidou  
Title: FUTURE VULNERABILITY ASSESSMENT OF FOREST FIRE SECTOR TO CLIMATE CHANGE IMPACTS IN CYPRUS  
Source: Unknown Source, 9 pages  
Year: 2014
Keywords: climate
Abstract: Forests of Cyprus are vulnerable to fire, primarily due to the long, hot and dry summers, mild winters, strong winds, intense relief and flammable xerophytic vegetation. These natural factors are further exacerbated by changing climatic conditions, which...
FRI Access Number: 96739

Author(s): Leo Courty, Khaled Chetehouna, Laurent Lemee, Carlos Fernandez-Pello, and Jean-Pierre Garo
Title: Biogenic volatile organic compounds emissions at high temperatures of common plants from Mediterranean regions affected by forest fires
Source: Journal of Fire Sciences, published 21 May 2014, 10.1177/0734904114536128
Year: 2014
Keywords: smoke
Contact: ferpello@me.berkeley.edu

Author(s): Leslie, I. N., R. Heinse, A. M. S. Smith, P. A. McDaniel
Title: Root decay and fire affect soil pipe formation and morphology in forested hillslopes with restrictive horizons
Source: soil science society of america journal, accepted 2014
Year: 2014
Keywords: soils
FRI Access Number: 96788

Author(s): Letnic, Mike, Chris Gordon, Max Tischler
Title: Desert small mammal responses to wildfire and predation in the aftermath of a La Nina driven resource pulse
Source: Austral Ecology 38: 841-849
Year: 2013
Keywords: wildlife ecology
Abstract: In arid Australia, flooding rains associated with the La Nina a phase of El Nino/Southern Oscillation (ENSO) prompt dramatic pulses of primary productivity, which in turn result in irruptions of rodents and their predators. When it is dry, the dense vegetation produced by extreme rainfall events can fuel extensive wildfires. In this study we investigated the effects of a wildfire that followed exceptional rainfalls associated with the La Nina event of 2010-2011 on small mammal assemblages-
FRI Access Number: 95223

Author(s): Leykin, Dmitry, Mooli Lahad, Nira Bonneh
Title: Posttraumatic Symptoms and Posttraumatic Growth of Israeli Firefighters, at One Month following the Carmel Fire Disaster
Source: Psychiatry journal 2013: 27412
Year: 2013
Keywords: psychology health
Abstract: Wildfire disasters are potentially traumatic events which directly and indirectly affect both citizens and first responders. The study of posttraumatic growth is scarcely found in the context of firefighters and only few studies have addressed this construct. In the current study, posttraumatic symptoms and posttraumatic growth...

FRI Access Number: 95540

Author(s): Li, W., J. J. M. H. Knops, X. Zuo, R. Laungani
Title: Fire frequency in nutrient-poor old field grassland
Source: Accepted Soil Science of American Journal, 2014
Year: 2014
Keywords: soils grasslands
Contact: wenjinli@163.com %o fire research institute, pdf nubmer 96741

Author(s): Ling, B., D. G. Goodin, R. L. Mohler, A. N. Laws, A. Joern
Title: Estimating Canopy Nitrogen Content in a Heterogeneous Grassland with Varying Fire and Grazing Treatments: Konza Prairie, Kansas, USA
Source: Remote Sensing 6: 4430-4453
Year: 2014
Keywords: ecology grazing
Abstract: Quantitative, spatially explicit estimates of canopy nitrogen are essential for understanding the structure and function of natural and managed ecosystems. Methods for extracting nitrogen estimates via hyperspectral remote sensing have been an active area...
Contact: dgoodin@ksu.edu
FRI Access Number: 96904

Title: Fire severity and landscape context effects on arboreal marsupials
Source: Biological Conservation 167: 137-148
Year: 2013
Keywords: severity wildlife australia ecology
Abstract: Although fire is a major form of natural disturbance worldwide, both fire-derived landscape context effects and the impacts of fire severity are poorly known for many species. To address this knowledge gap, we quantified the response of Australian arboreal marsupials to: (1) the spatial effects of fire, (2) fire severity, and (3) fire impacts on the availability of critical nesting...
Contact: david.lindenmayer@anu.edu.au
FRI Access Number: 96875

Author(s): Litton, Creighton M.
Title: Improved Wildfire Prediction Using Remote Sensing Technology on Guinea Grasslands in Hawaii
Source: Project ID: 11-3-1-12
Year: 2011
Keywords: remote sensing
Abstract: Recurring wildfires in landscapes dominated by nonnative, invasive grasses threaten adjacent ecosystems and developed areas. The invasive grass/wildfire cycle, a vicious cycle of frequent fire and nonnative grass invasion, and increased ignitions from anthropogenic activities have increased fire frequencies throughout the tropics, often with severe consequences for threatened biota and ecosystem goods and services. Wildfires in ecosystems now dominated by the nonnative guinea grass (Urochloa maxima), in particular, have become extremely problematic in the tropics. In order to simultaneously provide for effective fuels management and protection of remnant native species...

FRI Access Number: 96690

Author(s): Liu, M. H., Yi, L. T., Yu, S. Q., Zhou, G. M., Jiang, H., Li, X. P.
Title: Combustibility of fresh leaves of 26 forest species in China
Source: Journal of tropical forest science 25(4): 528-536
Year: 2013
Keywords: combustion

Author(s): Lohmann, D., B. Tietjen, N. Blaum, D. F. Joubert, F. Jeltsch
Title: Prescribed fire as a tool for managing shrub encroachment in semi-arid savanna rangelands
Source: Journal of Arid Environments, available online, 2014
Year: 2014
Keywords: prescribed burning encroachment
Abstract: Savanna rangelands worldwide are threatened by shrub encroachment, ie the increase of woody plant species at the cost of perennial grasses, causing a strong decline in the productivity of domestic livestock production. Although recent studies indicate that fire...
Contact: dirklohmann@gmx.net
FRI Access Number: 96773

Author(s): MacRoberts, B. R., M. H. MacRoberts, D. C. Rudolph
Title: Floristics of Ephemeral Ponds in East-central Texas
Source: Southeastern Naturalist 13; 15-25
Year: 2014
Keywords: ecology wetlands
Abstract: ... Once more common on the landscape, ponds of this type have been altered or destroyed by land-use changes and fire suppression, leading to massive encroachment of woody vegetation... Both Nacogdoches County ponds have been fire-suppressed for several decades...
Contact: crudolph01@fs.fed.us
Author(s): Magyari, Eniko Katalin, Petr Kunes, Gusztav Jakab, Pal Sumegi, Barbora Pelankova, Frank Schabitz, Mihaly Braun, Milan Chytry
Title: Late Pleniglacial vegetation in eastern-central Europe: Are there modern analogues in Siberia?
Source: Quaternary Science Reviews 95: 60-79
Year: 2014
Keywords: paleohistory
Abstract: To characterize Late Pleniglacial and particularly Last Glacial Maximum vegetation and climate, fossil pollen assemblages are often compared with modern pollen assemblages. Given the non-analogue climate of the LPG, a key question is how glacial pollen assemblages and thereby vegetation compare with modern...
Contact: magyari@bot.nhmus.hu
FRI Access Number: 96927

Author(s): Manzano-Agugliaro, F., J. Perez-Aranda and J. L. De La Cruz
Title: Methodology to obtain isochrones from large wildfires
Source: International Journal of Wildland Fire 23: 338-349
Year: 2014
Keywords: conflagrations
Abstract: A methodology to obtain isochrones at different stages of a wildfire through temporal georeferencing of aerial fire photographs is proposed. This methodology has been applied to two large wildfires (1098 and 4609 ha) that occurred in Spain. This study revealed a rate of propagation much higher than expected.
Contact: fmanzano@ual.es
FRI Access Number: 96708

Author(s): Maranon-Jimenez, Sara, J. Castro, A. Kowalski, P. Serrano-Ortiz, B. Ruiz, Ep Sancez-Canete, R. Zamora
Title: Post-Fire Soil Respiration in Relation to the Burnt Wood Management in a Mediterranean mountain ecosystem
Source: Forest Ecology and Management 261(8): 1436-1447
Year: 2011
Keywords: soils
Abstract: Wildfires are the main cause of forests and understory destruction in Mediterranean areas. One of the most dramatic consequences is the perturbation of carbon fluxes. A high percentage of the CO2 emitted by the ecosystem after a wildfire is due to soil respiration, which represents the most important uncertainty in the global carbon cycle. In this study we have quantified the soil respiration and its seasonal variability in reforested pine forests in the National and Natural Park of Sierra Nevada which were burned in September of 2005. Measurement campaigns were carried out along two years in two experimental plots at....
Contact: smaranon@ugr.es
Author(s): Marino, Eva, Carmen Hernando, Rosa Planelles, Javier Madrigal, Mercedes Guijarro and Ana Sebastian
Title: Forest fuel management for wildfire prevention in Spain: A quantitative SWOT analysis
Source: International Journal of Wildland Fire 23: 373-384
Year: 2014
Keywords: fuel prevention
Abstract: The role of forest fuel management for wildfire prevention in Spain was assessed by means of a quantitative SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis. Existing obstacles hindering the implementation of effective fuel management are identified and preliminary recommendations are provided to overcome them.
Contact: edu.g.ferreiro@gmail.com
FRI Access Number: 96712

Author(s): Martinez, Susana, Pablo Ramil, Belen de Novoa, Ramon Diaz, Javier Ferreiro, Boris Hinojo, Marco Rubinos, Carmen Recondo, Carlos Cabo, Xurxo Dorrego
Title: Fire and biodiversity: monitoring wildfire effects over biodiversity conservation in Galicia (NW Iberian Peninsula)
Source: pages 369-372, unknown publication
Year: 2010
Keywords: ecology
FRI Access Number: 96547

Author(s): Marzano, Raffaella, Matteo Garbarino, Enrico Marcolin, Mario Pividori, Emanuele Lingua
Title: Deadwood anisotropic facilitation on seedling establishment after a stand-replacing wildfire in Aosta Valley (NW Italy)
Source: Ecological Engineering 51: 117-122
Year: 2013
Keywords: ecology
Abstract: The capacity of a forest ecosystem to recover following major disturbances depends on the regeneration characteristics of the species and the environment at the time of establishment, resulting from several interacting biotic and abiotic factors. At climatically stressed sites major drivers of recruitment are the presence of a seed source and the availability...
Contact: raffaella.marzano@unito.it
FRI Access Number: 95193

Author(s): Martins, Martinho A. S., Ana I. Machado, Dalila Serpa, Sergio A. Prats, Silvia R. Faria, Maria E. T. Varela, Oscar Gonzalez-Pelayo, J. Jacob Keizer
Title: Runoff and inter-rill erosion in a Maritime Pine and a Eucalypt plantation following wildfire and terracing in north-central Portugal
Year: 2013
Keywords: soils erosion

Abstract: The purpose of this study was to assess how terracing affected overland flow and associated sediment losses, at the micro-plot scale (0.25 m²), in recently burnt stands of the two principal forest types in north-central Portugal, i.e. mono-specific stands of Maritime Pine and Eucalypt. Terracing is an increasingly common practice of slope engineering in the study region but its impacts on runoff and erosion are...

Contact: jjkeizer@ua.pt

FRI Access Number: 95220


Title: Assessing wildfire risk probability in Pinus pinaster Ait. stands in Portugal

Source: Forest Systems 21(1): 111-120

Year: 2012

Keywords: risk portugal

Abstract: Maritime pine (Pinus pinaster Ait.) is an important conifer from the western Mediterranean Basin. Maritime pine stands extend over 22% of the forest area in Portugal. In average, up to 266,640 ha of the Maritime pine area have been burned by wildfires in the period from 1997 to 2007 in this country. Yet no wildfire occurrence probability...

Contact: smarques@isa.utl.pt

FRI Access Number: 95172

Author(s): Mastrolonardo, Giovanni, Ornella Francioso, Michele Di Foggia, Sergio Bonora, Cornelia Rumpel, Giacomo Certini

Title: Application of thermal and spectroscopic techniques to assess fire-induced changes to soil organic matter in a Mediterranean forest

Source: Journal of Geochemical Exploration, Available online 4 May 2014

Year: 2014

Keywords: soils ecology

Contact: giovanni.mastrolomardo@unifi.it

Author(s): McDaniel, Josh

Title: Building Trust, Establishing Credibility, and Communicating Fire Issues with the Public

Source: Fire Science Digest 17, 12 pages

Year: 2014

Keywords: interface

FRI Access Number: 96699

Author(s): McFerran, Katrina and Kate Teggelove

Title: Music Therapy with Young People in Schools: After the Black Saturday Fires

Source: voices 11(1):

Year: 2011

Keywords: conflagration recovery australia

FRI Access Number: 96878
Author(s): McGranahan, Devan Allen, Henderson, Charlotte B., Hill, Jonas S., Raicovich, Gina M., Wilson, W. Nathan, Smith, C. Kenneth
Title: Patch Burning Improves Forage Quality and Creates Grass-bank in Old-field Pasture: Results of a Demonstration Trial
Source: Southeastern Naturalist 13(2): 200-207
Year: 2014
Keywords: prescribed burning agriculture
Contact: mcgranah@alumni.grinnell.edu
FRI Access Number: 96924

Author(s): McNab, W. Henry, Berg, Erik C., Oprean, Ted M., III
Title: Response to prescribed burning of 5-year-old hardwood regeneration on a mesic site in the Southern Appalachian Mountains
Year: 2012
Keywords: prescribed burning regeneration
FRI Access Number: 95183

Author(s): McRaven, William H.
Title: Life Lessons from Navy SEAL Training: Adm. William H. McRaven, commander of U.S. Special Operations Command, gave a commencement address last week that graduates, and their parents, won't soon forget
Year: 2014
Keywords: decision making
FRI Access Number: 96911

Author(s): Meigs, Garrett W., Robert E. Kennedy and Warren B. Cohen
Title: A Landsat time series approach to characterize bark beetle and defoliator impacts on tree mortality and surface fuels in conifer forests
Year: 2011
Keywords: remote sensing insects
Abstract: Insects are important forest disturbance agents, and mapping their effects on tree mortality and surface fuels represents a critical research challenge. Although various remote sensing approaches have been developed to monitor insect impacts, most studies have focused on single insect agents or single locations and have not related observed changes to ground-based measurements...
Contact: garrett.meigs@oregonstate.edu
FRI Access Number: 96793
Author(s): Meriono, A., A. Ferreiro, J. Salgado, M. T. Fonturbel, N. Barros, C. Fernandez and J. A. Vega
Title: Use of thermal analysis and solid-state $^{13}$C CP-MAS NMR spectroscopy to diagnose organic matter quality in relation to burn severity in Atlantic soils
Source: Geoderma, Available online 12 April 2014
Year: 2014
Keywords: soils
Abstract: Wildfire has highly variable effects on soil, and different conservation strategies are required to address different levels of soil degradation. Rapid diagnosis of soil burn severity is required to enable the design of emergency post-fire rehabilitation treatments. This study evaluated whether visually different levels of soil burn severity (SBS) reflect changes in SOM quality. Five areas recently...
Contact: agustin.merino@usc.es
FRI Access Number: 96802

Author(s): Miller, Sue
Title: Fire on the mountain: what motivates homeowners to reduce their wildfire risk?
Source: Fort Collins, CO: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station, [2013]: 8 p. (Science you can use bulletin; 7)
Year: 2013
Keywords: interface
FRI Access Number: 96652

Author(s): Miller, Sue
Title: Seeing red: new tools for mapping and understanding fire severity
Source: Fort Collins, CO: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station, [2013]: 9 p. (Science you can use bulletin; 6)
Year: 2013
Keywords: severity
FRI Access Number: 95943

Author(s): Mitsopoulos, I., G. Mallinis, A. Karali, C. Giannakopoulo
Title: Mapping fire behaviour in a Mediterranean landscape under different future climate change scenarios
Source: Unknown Source, 15 pages
Year: 2014
Keywords: climate
Abstract: The results of this study can be used as valuable components of decision support systems for long-term predictions of fire behaviour potential and contribute to judicial wildland fire suppression and management in Greece.
Contact: akarali@noa.gr
FRI Access Number: 96736
Author(s): Mitchell, Carl P. J., Randall Kolka, Shawn Fraver
Title: **Singular and combined effects of blowdown, salvage logging, and wildfire on forest floor and soil mercury pools**
Source: Environmental Science and Technology 46(15): 7963-70
Year: 2012
Keywords: silviculture salvage
Abstract: A number of factors influence the amount of mercury (Hg) in forest floors and soils, including deposition, volatile emission, leaching, and disturbances such as fire. Currently the impact on soil Hg pools from other widespread forest disturbances such as blowdown and management practices like salvage logging are unknown. Moreover, ecological and biogeochemical responses to disturbances are generally investigated within a single-disturbance context...
FRI Access Number: 95268

Author(s): Mohindru, Parul, Rajdeep Singh
Title: **Multi-Sensor Based Forest Fire Detection System**
Year: 2013
Keywords: detection
Abstract: Wireless Sensor Networks (WSNs) have become hot topic in field of research in recent days. In day to day life we come across many problems which left unresolved by humans, so at that time we think of collaborating human knowledge with technology to eradicate the problems. The efficient approaches of forest fire detection using multi-sensors describes one of the wireless sensor network applications for detecting...
FRI Access Number: 96798

Author(s): Mohr, Helen H., Waldrop, Thomas A.
Title: **Impact of rainfall on the moisture content of large woody fuels**
Year: 2012
Keywords: fuel moisture
FRI Access Number: 95184

Author(s): Molini, L., P. Fiorucci, M. D’Andrea, A. Parodi
Title: **Spatio-temporal relative humidity patterns and extreme wildfires in the Mediterranean**
Source: AGU Fall Meeting Abstracts 12/2011;
Year: 2011
Keywords: severity statistics
Abstract: Extremely hot temperature, strong winds and the actions of arsonists are usually referred as major causes of the thousands wildfires which spread every year through the
Mediterranean countries. Of all these wildfires, only few rare events can be considered as a major threat to the population and a civil protection emergency. Since, in case of severe weather conditions, the causes of fire ignition are often related with negligence, it is extremely important to be able to predict and discriminate extreme danger conditions, in order to avoid...

**Author(s):** Montealegre, A. L., M. T. Lamelas, M. A. Tanase, J. de la Riva  
**Title:** Forest Fire Severity Assessment Using ALS Data in a Mediterranean Environment  
**Source:** Remote Sensing 6: 4240-4265  
**Year:** 2014  
**Keywords:** severity remote sensing  
**Abstract:** Mediterranean pine forests in Spain experience wildland fire events with different frequencies, intensities, and severities which result in diverse socio-ecological consequences. In order to predict fire severity, spectral indices derived from remotely...

**Contact:** mihai@tma.ro  
**FRI Access Number:** 96749

**Author(s):** Moore, David, Harjinder Sembhi, John Remedios, Keith Tereszchuk  
**Title:** Using IASI and MIPAS in combination to characterise CO and other volatile organic compound emissions from fires  
**Source:** 3rd IASI INTERNATIONAL CONFERENCE, 04/2013  
**Year:** 2013  
**Keywords:** smoke  
**Abstract:** Short-lived species emitted from wildfires, such as carbon monoxide (CO) and volatile organic compounds (VOCs), carry a lot of information on atmospheric processes relating to chemistry, convection and emission...

**Contact:** david.moore@le.ac.uk  
**FRI Access Number:** 95208

**Author(s):** Morgan, P., E. K. Heyerdahl, C. Miller, A. M. Wilson and Carly E. Gibson  
**Title:** Northern Rockies pyrogeography: An example of fire atlas utility  
**Source:** Fire Ecology 10(1): 14 pages  
**Year:** 2014  
**Keywords:** ecology  
**Abstract:** We demonstrated the utility of digital fire atlases by analyzing forest fire extent across cold, dry, and mesic forests, within and outside federally designated wilderness areas during three different fire management periods: 1900 to 1934, 1935 to 1973, and...

**Contact:** pmorgan@uidaho.edu  
**FRI Access Number:** 96723

**Author(s):** Morris, Rowena Helen, Deirdre Dragovich, Bertram Ostendorf  
**Title:** Hillslope erosion and post-fire sediment trapping at Mount Bold, South Australia  
**Source:** Wildfire and water quality: processes, impacts and challenges, Banff, Canada; 06/2012
Author(s): Moroney, Jolene R., Philip W Rundel
Title: Effects of Fire and Fireline Disturbance on the Plant Community in a Southern California Ecological Reserve
Source: MADRONO 60(3): 173-178
Year: 2013
Keywords: suppression ecology
Abstract: Native plants in most California ecosystems are adapted to fire, but altered fire regimes and disturbance from firefighting activity, such as the construction of firebreaks or firelines, can change plant community composition and the ratio of native to nonnative species. In October 2007, a wildfire burned 710 acres through a chaparral/grassland mosaic on an ecological reserve, providing an opportunity to quantify fire...
Contact: jmoroney@ucla.edu
FRI Access Number: 95232

Author(s): Mullaugh, Katherine M., Jade N. Byrd, G. Brooks Avery, Ralph N. Mead, Joan D. Willey, Robert J. Kieber
Title: Characterization of carbohydrates in rainwater from the Southeastern North Carolina
Source: Chemosphere 107: 51-57
Year: 2014
Keywords: soils
Abstract: Carbohydrates have been widely reported in atmospheric aerosols, but have not previously been quantified in rainwater. We have identified and quantified a series of 11 specific compounds including monosaccharides (glucose, fructose, arabinose, galactose and pinitol), disaccharides (sucrose and trehalose), sugar alcohols (arabitol, dulcitol and mannitol)...
Contact: kmullaugh@elon.edu

Author(s): Murthy, M. M., G. M. Devagiri
Title: Impact of fire on the natural regeneration? A case study in Rajiv Gandhi National Park
Source: Advances in Applied Research 6(1): 35-38
Year: 2014
Keywords: regeneration
Abstract: A study was carried out to assess the effect of forest fire on the natural regeneration of vegetation in five forest ranges of Rajiv Gandhi National Park (RGNP) in Coorg District, Karnataka. Regeneration was assessed in the fire affected area at two spells, after 2-3...
Contact: mmmurthy@rediffmail.com

Author(s): Musso, C., H. S. Miranda, S. S. Aires, A. C. Bastos
Title: Simulated post-fire temperature affects germination of native and invasive grasses in cerrado (Brazilian savanna)
Source: Plant Ecology and Diversity, available online 21014
Year: 2014
Keywords: regeneration seeds grasslands tropics
Abstract: Although fire is an important factor in determining cerrado vegetation, information about its effect on seed banks is sparse. Cerrado fires are rapidly moving surface fires with low residence time, producing only short-term heating of the uppermost...
Contact: cmusso@ua.pt
FRI Access Number: 96787

Author(s): Musso, Carolina, Loureiro, Susana, Soares, Amadeu M. V. M., Miranda, Heloisa S.
Title: Does the altered thermal regime measured in the Cerrado soils after fires have a significant effect on germination of native and invasive grasses?
Year: 2011
Keywords: soils regeneration grasslands tropics
Contact: cmusso@ua.pt %o not available from author

Author(s): Musso, Carolina, Miranda, Heloisa S., Soares, Amadeu M. V. M., Loureiro, Susana
Title: The bait-lamina test as a tool to assess differences in soil activity caused by season, fire and invasion by alien grasses in Cerrado, Brazil
Year: 2011
Keywords: soils exotics grasslands tropics
Contact: cmusso@ua.pt %o not available from author

Author(s): Mutch, Bob W.
Title: Framing our fire story to promote sustainable policies and practices
Source: Wildfire 22(3): 12-16
Year: 2013
Keywords: policy
Current Titles in Wildland Fire, July, 2014

Author(s): Nadler, E.
Title: Effects of burning season on recorded fire temperature and the regeneration of oak species
Source: The Ohio State University. School of Environment and Natural Resources Honors Theses; 2014
Year: 2014
Keywords: Quercus, Acer rubrum, prescribed fire, oak management, burn season, fire intensity, hardwood forests
Abstract: The composition of eastern deciduous forests has changed within the last 100 years as a result of decreased natural fire disturbances. The presence of oak (Quercus spp.) has greatly declined, and has been increasingly replaced by maple (Acer spp.) and other...
FRI Access Number: 96640

Author(s): Nakau, K.
Title: An improved algorithm for wildfire detection
Source: AGU Fall Meeting Abstracts 12/2010;
Year: 2010
Abstract: Satellite information of wild fire location has strong demands from society. Therefore, Understanding such demands is quite important to consider what to improve the wild fire detection algorithm. Interviews and considerations imply that the most important improvements are geographical resolution of the wildfire product and classification of fire; smoldering or flaming. Discussion with fire service agencies are performed with fire...

Author(s): Natalia Rodriguez, Carmen Arbelo, Jesus Notario del Pino, Marcelino del Arco, Antonio Rodriguez-Rodriguez, Alexis Hernandez
Title: Efectos de un incendio forestal (Tenerife, Islas Canarias, verano de 2007) bajo bosques de pinar sobre algunas propiedades del suelo y su relacion con la repelencia al agua a corto y medio plazo
Source: Spanish Journal of Soil Science 3(1): 56-72
Year: 2013
Keywords: soils
Abstract: Forest fires modify the soil environment, often triggering severe soil degradation. In this paper, we studied the impact of a large northern Tenerife Canary pine forest wildfire on a set of relevant soil properties, focusing on their evolution in time and relationship with soil water repellency. To do this, soils were sampled...
Contact: antororo@ull.es
FRI Access Number: 95251

Author(s): Nazaries, Loic, Kevin R. Tate, Des J. Ross, Jagrati Singh, John Dando, Surinder Saggar, Elizabeth M. Baggs, Peter Millard, J. Colin Murrell and Brajesh K. Singh
Title: Response of methanotrophic communities to afforestation and reforestation in New Zealand
Source: The ISME Journal (2011) 5, 1832-1836; doi:10.1038/ismej.2011.62; published online 19 May 2011
Current Titles in Wildland Fire, July, 2014

Year: 2011
Keywords: ecology
Abstract: Methanotrophs use methane (CH4) as a carbon source. They are particularly active in temperate forest soils. However, the rate of change of CH4 oxidation in soil with afforestation or reforestation is poorly understood. Here, soil CH4 oxidation was examined in New Zealand volcanic soils under regenerating native forests following burning,...
Contact: b.singh@uws.edu.au
FRI Access Number: 96729

Author(s): Neel, Alina
Title: Effects of Fire and Invasive Paulownia tomentosa on Native Tree Regeneration in Southern Ohio After Two Years
Source: The Ohio State University. School of Environment and Natural Resources Honors Theses; 2012
Year: 2012
Keywords: ecology exotics
Abstract: Paulownia (Paulownia tomentosa) is a tree native to southeast Asia that has shown invasive behavior in the eastern United States. The objective of this project was to determine the effects of paulownia invasion, wildfire, and harvesting activity on native tree seedling growth and establishment
FRI Access Number: 96641

Author(s): Nel, Jeanne L., David C. Le Maitre, Deon C. Nel, Belinda Reyers, Sally Archibald, Brian van Wilgen, Greg Forsyth, Andre K. Theron, Patrick J. O'Farrell, Jean-Marc Mwenge Kahinda
Title: Natural hazards in a changing world: A case for ecosystem-based management
Year: 2014
Keywords: hazards
Abstract: Communities worldwide are increasingly affected by natural hazards such as floods, droughts, wildfires and storm-waves. However, the causes of these increases remain underexplored, often attributed to climate changes or changes in the patterns of human exposure. This paper aims to quantify the effec...
Contact: jnel@csir.co.za
FRI Access Number: 96766

Author(s): Nelson, Kurtis J., Connot, Joel, Peterson, Birgit, Martin, Charley
Title: The Landfire refresh strategy: updating the National Dataset
Source: Fire Ecology 9(2): 80-101
Year: 2013
Keywords: management
FRI Access Number: 95944
Author(s): Nicholls, N.
Title: Comments on Influence of location, population, and climate on building damage and fatalities due to Australian bushfire: 1925-2009
Source: Wea. Climate Soc. 3: 61-62
Year: 2011
Keywords: interface evacuation australia
FRI Access Number: 96822

Author(s): Nocentini, Caterina, Giacomo Certini, Heike Knicker, Ornella Francioso, Cornelia Rumpel
Title: Nature and reactivity of charcoal produced and added to soil during wildfire are particle-size dependent
Source: Organic Geochemistry 41: 682-689
Year: 2010
Keywords: paleohistory
Abstract: Charcoal added to soil by wildfires is usually considered to be part of the most stable pool of soil organic matter (SOM). It consists of a continuum of slightly burned plant residues to completely charred material. We sampled the macroscopic charcoal pool produced by a moderate intensity wildfire in a pine coastal forest in Tuscany (Central Italy) with the aim of assessing the relationship between its particle size and chemical composition as well as its reactivity...
Contact: cornelia.rumpel@grignon.inra.fr
FRI Access Number: 96852

Author(s): Nocentini, Caterina, Giacomo Certini, Heike Knicker, Ornella Francioso, Cornelia Rumpel
Title: Nature and reactivity of charcoal produced and added to soil during wildfire are particle-size dependent
Source: Organic Geochemistry 41(7):682-689
Year: 2010
Keywords: soils
Abstract: Charcoal added to soil by wildfires is usually considered to be part of the most stable pool of soil organic matter (SOM). It consists of a continuum of slightly burned plant residues to completely charred material. We sampled the macroscopic charcoal pool produced by a moderate intensity wildfire in a pine coastal forest in Tuscany (Central Italy) with the aim of assessing the relationship between its particle size and chemical composition as well as its reactivity. Our conceptual approach included particle...
Contact: cornelia.rumpel@grignon.inra.fr
FRI Access Number: 96587

Author(s): North, M., M. Hurteau
Title: Wildfire effects on carbon stocks and emissions in fuels treated forests
Source: AGU Fall Meeting Abstracts 12/2010
Year: 2010
Current Titles in Wildland Fire, July, 2014

Keywords: smoke
Abstract: The large carbon stores of many of the worlds' forests are prone to reversal from wildfire. Fuels treatments can reduce wildfire emissions but at an immediate carbon reduction cost. Comparing these tradeoffs in forest burned by wildfire, we found treatments reduced wildfire emissions by 58% but total carbon loss, including biomass removed, was...

Author(s): Nyman, Petter, Gary J. Sheridan, Patrick N. J. Lane
Title: Modeling the effects of surface storage, macropore flow and water repellency on infiltration after wildfire
Source: Journal of Hydrology 513:301
Year: 2014
Keywords: soils repellency
Abstract: Infiltration after wildfire is initially controlled by storage in wettable surface material. Steady state infiltration is controlled by the hydraulic conductivity...
Contact: FRI Access Number: 96760

Author(s): Oliveira, S., J. Pereira, J. San-Miguel-Ayanz, L. Lourenço
Title: Exploring the spatial patterns of fire density in Southern Europe using Geographically Weighted Regression
Source: Applied Geography 51: 143-157
Year: 2014
Keywords: statistics
Abstract: The spatial patterns of fire occurrence were analyzed in two regions of Southern Europe, focusing on the long-term factors that influence fire distribution. The relationship between fire occurrence and the physical and anthropogenic variables collected was...
Contact: sisoliveira@gmail.com
FRI Access Number: 96873

Author(s): Oswald, B. P., M. M. Bataineh, I. V. McWhorter, M. H. Legg
Title: Fire Exclusion Effects within the Pinus palustris Communities of Upland Island Wilderness, Texas
Source: Southeastern Naturalist 13: 80-92
Year: 2014
Keywords: ecology exclusion
Abstract: This study quantifies differences in vegetation richness, composition, and structure between sites where fire has been excluded for 20 years and frequently burned sites in a Pinus palustris (Longleaf Pine) community within the Upland Island Wilderness in eastern...
Contact: boswald@sfasu.edu

Author(s): Ouarmim, S., H. Asselin, Y. Bergeron, A. A. Ali, C. Hely
Title: Stand structure in fire refuges of the eastern Canadian boreal mixedwood forest
Source: Forest Ecology and Management 324: 1-7
Year: 2014
Keywords: ecology canada
Abstract: Wildfires in boreal forest ecosystems usually spare tree stands called post-fire residual patches. There are two types of post-fire residual patches: (1) patches that only escaped fire by chance, probably due to local meteorological conditions unsuitable for fire...
Contact: samira.ouarmim@uqat.ca
FRI Access Number: 96757

Author(s): Ouarmim, Samira, Hugo Asselin, Christelle Hely, Yves Bergeron, Adam A. Ali
Title: Long-term dynamics of fire refuges in boreal mixedwood forests
Source: Journal of Quaternary Science, DOI: 10.1002/jqs.2685
Year: 2014
Keywords: boreal mixedwood forest; fire refuges; local conditions; long-term forest dynamics; moisture
Abstract: Burned areas in boreal mixedwood forests usually include tree patches that partially or entirely escaped fire. Some of these post-fire residual stands - called fire refuges - can escape several consecutive fires due to particular microsite conditions.
Contact: samira.ouarmim@uqat.ca
FRI Access Number: 95219

Author(s): Overholt, K. J., A. J. Kurzawski, J. Cabrera, M. Koopersmith
Title: Fire Behavior and Heat Fluxes for Lab-Scale Burning of Little Bluestem Grass
Source: submitted to Fire Safety Journal
Year: 2014
Keywords: behavior grasslands
Abstract: This paper discusses the physics and fire behavior of grassland fuel using experimental and modeling results. Experimental characterization included intermediate-scale tests to determine the mass loss rates, heat release rates (HRRs), and flame heat...
Contact: dezekoye@mail.utexas.edu %o fire research institute, pdf nubmer 96740

Author(s): Owen, G., J. McLeod, C. A. Kolden, D. Ferguson, and T. J. Brown
Title: Predictive Forecasting in wildland fire management: A social network analysis of the southwestern U. S. Weather
Source: Climate and Society 4(2): 90-102
Year: 2012
Keywords: weather
Contact: c.kolden@uidaho.edu
FRI Access Number: 94991

Author(s): Padilla, Marc, Stephen V. Stehman, Javier Litago, Emilio Chuvieco
Title: Assessing the Temporal Stability of the Accuracy of a Time Series of Burned Area Products
Source: Remote Sensing 6: 2050-2068
Year: 2014
Keywords: remote sensing
Abstract: Temporal stability, defined as the change of accuracy through time, is one of the validation aspects required by the Committee on Earth Observation Satellites’ Land Product Validation Subgroup. Temporal stability was evaluated for three burned...
Contact: marc.padilla@uah.es
FRI Access Number: 96231

Author(s): Padkao, Tadsawiya, Patchareeya Amput, Sujittra Kluayhomthong, Chulee U Jones
Title: Impacts of wildfire smog on lung volume and pulmonary function in healthy people
Source: The 2nd Phayao Research Conference; 01/2013
Year: 2013
Keywords: smoke
Abstract: The most serious problem in upper northern area of Thailand is wildfire smog pollution due to intrusions and deforestations of human by burning the forest or bushfires that adverse effect on human health. However, from our knowledge, the effects of the smoke in the patient are well documents, but there is limited information on the potential change...
Contact: mjz_tad@yahoo.com
FRI Access Number: 95177

Author(s): Page, Wesley G., Martin E. Alexander and Michael J. Jenkins
Title: Wildfire's resistance to control in mountain pine beetle-attacked lodgepole pine forests
Source: The Forestry Chronicle 89(6): 783-794
Year: 2013
Keywords: insects
Abstract: Concerns about the impacts of mountain pine beetle (Dendroctonus ponderosae Hopkins)-caused tree mortality on wildfire potential in lodgepole pine (Pinus contorta Dougl. var. latifolia Engelm.) forests have to date largely focused on the potential for extreme fire behaviour, including the development and spread of crown fires. Given that the wildland fire environment...
Contact: mea2@telus.net
FRI Access Number: 96824

Author(s): Page, Wesley G.
Title: Bark Beetle-Induced Changes to Crown Fuel Flammability and Crown Fire Potential
Source: Ph. D. Dissertation, Forestry Department, Utah State University, 272 pages
Year: 2014
Keywords: insects behavior
Abstract: Recent outbreaks of mountain pine beetle (Dendroctonus ponderosae Hopkins) in lodgepole pine (Pinus contorta Dougl. ex Loud. var. latifolia Engelm.) forests and spruce beetle (Dendroctonus rufipennis Kirby) in Engelmann spruce (Picea engelmannii Parry ex...
Current Titles in Wildland Fire, July, 2014

Author(s): Page, Wesley G., Martin E. Alexander and Michael J. Jenkins
Title: Wildfire's resistance to control in mountain pine beetle-attacked lodgepole pine forests
Source: The forestry chronicle 89(6): 783-794
Year: 2013
Keywords: insects ecology
Abstract: Concerns about the impacts of mountain pine beetle (Dendroctonus ponderosae Hopkins)-caused tree mortality on wildfire potential in lodgepole pine (Pinus contorta Dougl. var. latifolia Engelm.) forests have to date largely focused on the potential for extreme fire behaviour, including the development and spread of crown...
FRI Access Number: 94727

Author(s): Pappis, Costas P., Nikolaos Panagiotis Rachaniotis
Title: Scheduling in a multi-processor environment with deteriorating job processing times and decreasing values: The case of forest fires
Source: Journal of Heuristics 16:617-632
Year: 2010
Keywords: economics decision making
Abstract: In forest fire fighting, time and effort required to control a fire increase if fire containment effort is delayed. The problem of scheduling multiple resources employed as parallel identical or non-identical processors in order to contain Nr2 fires may be tackled using the concept of deteriorating jobs. In this paper, the above problem is stated and a model is formulated, the criterion being to maximize the total remaining value of the burnt areas and a real-time synchronous heuristic algorithm is proposed. The heuristic algorithm's efficiency was compared to real data provided by Greek Fire Corps from a severe wildfire near Athens in June-July, 2007. Keywords Forest fires-Scheduling-Parallel processors-Deteriorating jobs-Multiprocessor jobs...
Contact: pappis@unipi.gr
FRI Access Number: 96841

Author(s): Patykowski, J., M. Gibson, M. Dell
Title: A review of the conservation ecology of round-leaf Pomaderris' Pomaderris vacciniifolia F. Muell. ex Reissek (Rhamnaceae)
Source: Victorian Naturalist 131(2): 45-51
Year: 2014
Keywords: ecology
Abstract: ... Flower-ing and successful seed set were observed as early as two years after germination. Response to fire The only documented detail about the fire response of P. vacciniifolia comes from Cameron (2006)...

Author(s): Paveglio, Travis, Tony Prato, Douglas Dalenberg and Tyron Venn
Title: Understanding evacuation preferences and wildfire mitigations among Northwest Montana residents
Current Titles in Wildland Fire, July, 2014

Year: 2014
Keywords: interface management
Abstract: This study explores the evacuation preferences of Flathead County, Montana, US residents at risk from wildfire. We found differences in the performance of vegetation management among residents who plan to evacuate or remain at home. Evacuation preferences can be partially explained by characteristics such as demographics.
Contact: travispaveglio@gmail.com
FRI Access Number: 96718

Author(s): Pelegrin, N., E. H. Bucher
Title: Long-term effects of a wildfire on a lizard assemblage in the Arid Chaco forest
Source: Journal of Arid Environments 74:368-372
Year: 2010
Keywords: wildlife reptiles ecology
Abstract: The long-term (14 years) effects of a high-intensity wildfire on a lizard assemblage were studied in Chancani Provincial Natural Park and Forest Natural Reserve (Cordoba, Argentina), by comparing a burned area with an unburned one within the protected area. Lizard diversity and abundance were measured using 25 drift-fence pitfall traps in the burned area and in a portion of the unburned forest during two summers (2006-2007 and 2007-2008). A total of 426 lizards belonging to eight species...
Contact: npelegrin@efn.uncor.edu
FRI Access Number: 96538

Author(s): Peppin, D. L., A. L. Mottek-Lucas, P. Z. Fule
Title: Post-fire seeding in western United States forests: perspectives of resource managers
Source: Fire Ecology 10: 31-42
Year: 2014
Keywords: regeneration ecology
Abstract: Recent reviews have brought into question the effectiveness of post-fire seeding in mitigating soil erosion and non-native plant invasions, yet millions of dollars continue to be spent annually on post-fire seeding as a primary post-fire rehabilitation response. Overall policy development and implementation direction regarding post-fire...
Contact: donna_peppin@nps.gov
FRI Access Number: 96638

Author(s): Perry, G. L. W., J. M. Wilmshurst, M. S. McGlone
Title: Ecology and long-term history of fire in New Zealand
Year: 2014
Keywords: history
Abstract: Fire is a complex physical and ecological process and one that has dramatically affected New Zealand's landscapes and ecosystems in the post-settlement era. Prior to human settlement in the late 13th century, the Holocene palaeoenvironmental record...
Author(s): Pereira, P., Kamil Feridun Turkman, maria Antonia Amaral Turnman, Ana Sa, and Jose M. C. Pereira
Title: Quantification of annual wildfire risk; A spatio-temporal point process approach
Source: Statistica 73(1): 55-68
Year: 2013
Keywords: risk statistics
Abstract: Policy responses for local and global fire management depend heavily on the proper understanding of the fire extent as well as its spatio-temporal variation across any given study area. Annual fire risk maps are important tools for such policy responses, supporting strategic decisions such as location-allocation of equipment and human...
FRI Access Number: 96840

Author(s): Pereira, P., P. Mierauskas, A. Novara
Title: STAKEHOLDERS' PERCEPTIONS ABOUT FIRE IMPACTS ON LITHUANIAN PROTECTED AREAS
Source: Land Degradation & Development
Year: 2014
Keywords: ecology silviculture soils
Abstract: The aim of this work is to study Lithuanian stakeholders' perceptions of fire impacts in protected areas. For this study the stakeholders consisted of foresters, ecologists and farmers. A clear understanding of the opinions of stakeholders about fire effects on...
Contact: Paulo@mruni.eu

Author(s): Pereira, P., X. Ubeda, J. Mataix-Solera, M. Oliva, A. Novara
Title: Short-term changes in soil Munsell colour value, organic matter content and soil water repellency after a spring grassland fire in Lithuania
Source: Solid Earth 5: 209-225
Year: 2014
Keywords: soils grasslands
Abstract: Fire is a natural phenomenon with important implications on soil properties. The degree of this impact depends upon fire severity, the ecosystem affected, topography of the burned area and post-fire meteorological conditions. The study of fire effects on soil...
Contact: paulo@mruni.eu
FRI Access Number: 96732

Author(s): Pereira, Paulo, Xavier Ubeda, Deborah Martin, Jorge Mataix-Solera, Artemi Cerda, Maria Burguet
Title: Wildfire effects on extractable elements in ash from a Pinus pinaster forest in Portugal
Source: Hydrological Processes 01/2013
Year: 2013
Keywords: soils
Abstract: The aim of this work is to study the effects of a wildfire on water-extractable elements in ash from a Pinus pinaster forest located in Portugal. The pH, Electrical Conductivity (EC), Calcium (Ca²⁺), Magnesium (Mg²⁺), Sodium (Na⁺), Potassium (K⁺),...
Contact: pereiraub@gmail.com
FRI Access Number: 95167

Author(s): Persiani, Anna Maria and Oriana Maggi
Title: Species-abundance distribution patterns of soil fungi: contribution to the ecological understanding of their response to experimental fire in Mediterranean maquis (southern Italy)
Source: Mycologia 105(2): 260-276
Year: 2013
Keywords: fungi ecology
Abstract: Experimental fires, of both low and high intensity, were lit during summer 2000 and the following 2 y in the Castel Volturno Nature Reserve, southern Italy. Soil samples were collected Jul 2000 - Jul 2002 to analyze the soil fungal community dynamics. Species abundance distribution patterns (geometric, logarithmic, log normal, broken-stick) were compared. We plotted datasets with information both on species richness and abundance for total...
Contact: Annamaria.persiani@uniroma1.it
FRI Access Number: 95906

Author(s): Peshev, Zahary Y., Tanja N. Dreischuh, Eleonora N. Toncheva, Dimitar V. Stoyanov
Title: Lidar observations and characterization of biomass burning aerosols over Sofia: Long-range transport of forest wildfire smoke
Year: 2013
Keywords: remote sensing smoke
Abstract: Results of remote measurements and characterization of biomass burning aerosols observed in the low troposphere over Sofia, Bulgaria, are presented and discussed. Measurements are accomplished by using two-wavelength elastic-scatter lidar, operating at 1064 nm and 532 nm. The aerosols are identified as to be consisted mainly of aged smoke...
Contact: zypeshev@ie.bas.bg
FRI Access Number: 95173

Author(s): Petty, J. B.
Title: Hotshots
Source: Booklist 110(15): 73
Year: 2014
Keywords: firefighters
FRI Access Number: 96783
Current Titles in Wildland Fire, July, 2014

Author(s): Petrenko, Mariya, Ralph Kahn, Mian Chin, Amber Soja, Tom Kucsera and Harshvardhan1
Title: The use of satellite-measured aerosol optical depth to constrain biomass burning emissions source strength in the global model GOCART
Year: 2012
Keywords: smoke
Abstract: Simulations of biomass burning (BB) emissions in chemistry transport models strongly depend on the inventories that define emission source location and strength. We use 13 global biomass burning emission estimates, including the widely used Global Fire Emission Database (GFED) monthly and daily versions...
Contact: mshcherb@purdue.edu
FRI Access Number: 095214

Author(s): Phillips, Ross J., Waldrop, Thomas A.
Title: Fuel loading following fuel-reduction treatments and impacts from natural disturbances
Year: 2012
Keywords: fuel
FRI Access Number: 95185

Author(s): Pickell, Paul D., David W. Andison, Nicholas C. Coops
Title: Using natural variability pattern strategies to understand anthropogenic disturbances in Alberta
Source: Future Forestry Leaders Symposium; 02/2012
Year: 2012
Keywords: indigenous
Abstract: Development and management of Alberta's forests has intensified in the past century as result of economic demand for natural resources such as bitumen, natural gas and timber. The extraction of these natural resources including seismic exploration, open pit mining and timber harvesting has been a large source of anthropogenic disturbance to Alberta’s forests. As a result, current disturbance regimes...
Contact: ppickell@interchange.ubc.ca
FRI Access Number: 95266

Author(s): Picos, Juan, Maria Loureiro, Jesus Barreal, Enrique Valero
Title: On insurance as a tool for securing forest restoration after wildfire occurrence
Source: RESTORING FORESTS: Advances in Techniques and Theory (IUFRO); 09/2011
Year: 2011
Keywords: restoration
Abstract: Forest owners face multiple risks in their production process, which can reduce the value of the forestry products, being wildfires one of these risks. Although fire insurance for real estate owners is popular and it is frequent in some agricultural crops, the development a forestry production insurance scheme accounting for wildfire risks has been lagging behind them. If any approach would provide an actuarially fair rate, it may attract insurance companies...

Contact: jesusbarreal@hotmail.com
FRI Access Number: 95240

Author(s): Pickell, Paul D., David W. Andison, Nicholas C. Coops
Title: Characterizations of anthropogenic disturbance patterns in the mixedwood boreal forest of Alberta, Canada
Source: Forest Ecology and Management 04/2013
Year: 2013
Keywords: indigenous
Abstract: Ecosystem-based management (EBM) has emerged as a dominant paradigm for the Canadian boreal forest. One of the principles of EBM is to maintain ecosystem function by means of management activities that approximate the historic patterns or processes responsible for maintaining a range of landscape conditions. This ideal...

Contact: ppickell@alumni.ubc.ca
FRI Access Number: 95221

Author(s): Pierce, J. B., D. C. Rudolph, S. J. Burgdorf, R. R. Schaefer
Title: Winter Movements of Louisiana Pine Snakes (Pituophis ruthveni) in Texas and Louisiana
Source: Southeastern Naturalist 13: 137-145
Year: 2014
Keywords: wildlife snakes
Abstract: Within the snake's historical range, this habitat is maintained by frequent fire (Conner et al. ... These snakes simply retreated underground as the fire approached them, and were then insulated from the effects of the passing fire...

Contact: jbpierce@fs.fed.us
FRI Access Number: 96892

Author(s): Pierson, F. B., C. J. Williams, S. P. Hardegree, P. E. Clark, P. R. Kormos, O. Z. Al-Hamdan
Title: Hydrologic and erosion responses of sagebrush steppe following juniper encroachment, wildfire, and tree cutting
Source: Rangeland Ecology and Management 66(3): 274-289
Year: 2013
Keywords: hydrology erosion soils
Abstract: 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 2 and 13 m2 scales) and concentrated flow
Current Titles in Wildland Fire, July, 2014

Simulations and measures of vegetation, ground cover, and soils to investigate hydrologic and erosion impacts of western juniper (Juniperus occidentalis Hook.)...

**Contact:** fred.pierson@ars.usda.gov

**FRI Access Number:** 95211

**Author(s):** Pineda, Nicolau, Joan Montanya, Oscar van der Velde

**Title:** Characteristics of lightning related to wildfire ignitions in Catalonia

**Source:** Atmospheric Research 135-136: 380-387

**Year:** 2014

**Keywords:** ignition

**Abstract:** What are the characteristics of lightning that influence the probability that an individual stroke will ignite a wildfire? It is generally accepted that long continuing current following some return strokes is the cause of ignition in forest fuels. However, because these low-level currents are not detectable with operative Lightning Location Systems, other lightning...

**Contact:** npineda@meteo.cat

**FRI Access Number:** 95261

**Author(s):** Platt, Rutherford V.

**Title:** Wildfire hazard in the home ignition zone: An object-oriented analysis integrating LiDAR and VHR satellite imagery

**Source:** Applied Geography 51: 108-117

**Year:** 2014

**Keywords:** interface remote sensing

**Abstract:** Many spatially explicit studies of wildfire hazard focus on the wildland-urban interface (WUI), the area where natural vegetation intersects or mixes with structures. However, research suggests that the characteristics of a small portion of the WUI, the home ignition zone, largely determine potential for ignition from wildfire. The home ignition zone (HIZ) is the area that...

**Contact:** rplatt@gettysburg.edu

**Author(s):** Pleniou, M. and N. Koutsias

**Title:** Relationships between vegetation indices and different burn and vegetation ratios: A multi-scale approach applied in a fire affected area

**Source:** Proc. SPIE 8795, First International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2013), 87951I (August 5, 2013); doi: 10.1117/12, 2028349

**Year:** 2013

**Keywords:** severity

**Abstract:** Vegetation indices have been widely used in remote sensing literature for burned land mapping and monitoring. In the present study we used satellite data (IKONOS, LANDSAT, ASTER, MODIS) of multiple spectral (visible, near, shortwave infrared) and...

**Contact:** nkoutsia@cc.uoi.gr

**FRI Access Number:** 95896
Current Titles in Wildland Fire, July, 2014

Author(s): Pleniou, M, N Koutsias
Title: Sensitivity of spectral reflectance values to different burn and vegetation ratios: A multi-scale approach applied in a fire affected area
Source: ISPRS Journal of Photogrammetry and Remote 79, May 2013, Pages 199-210
Year: 2013
Keywords: remote sensing
Abstract: The aim of our study was to explore the spectral properties of fire-scorched (burned) and non fire-scorched (vegetation) areas, as well as areas with different burn/vegetation ratios, using a multisource multiresolution satellite data set. A case study was undertaken...
Contact: nkoutsia@cc.uoi.Gr
FRI Access Number: 95252

Author(s): Poirier, Vincent, David Pare, Juliette Boiffin, Alison D. Munson
Title: Combined influence of fire and salvage logging on carbon and nitrogen storage in boreal forest soil profiles
Source: Forest Ecology and Management 326: 133-141
Year: 2014
Keywords: silviculture soils
Abstract: Boreal forest soils are a significant component of the global C cycle. Although wildfire and subsequent salvage logging are major disturbances in this ecosystem, their combined influence on soil organic carbon (SOC) and total soil nitrogen (N) storage is poorly understood. Our objective was to investigate the recent influence of fire and post-fire salvage logging on SOC and total soil N stocks...

Author(s): Pritchard, M. S., G. J. Kooperman, Z. Zhao, M. Wang, L. M. Russell, R. C. Somerville, S. J. Ghan
Title: Impact of capturing rainfall scavenging intermittency using cloud superparameterization on simulated continental scale wildfire smoke transport
Source: AGU Fall Meeting Abstracts 12/2011
Year: 2011
Abstract: Evaluating the fidelity of new aerosol physics in climate models is confounded by uncertainties in source emissions, systematic error in cloud parameterizations, and inadequate sampling of long-range plume concentrations. To explore the degree to which cloud parameterizations distort aerosol processing and scavenging...

Author(s): Pungkhom, P.
Title: Health Risk Assessment from Bush Fire Air Pollutants using Statistical Analysis and Geographic Information System: A Case Study in Northern Thailand
Year: 2014
Keywords: smoke
Abstract: The association between fine particulate matter (PM10), carbon monoxide (CO), ozone (O3), volatile organic compounds (VOCs) and health risk were analysed
from the air quality data and frequency of fire events in 2009-2013. The risk areas and Hazard...

Author(s): Raharjo, B. and N. Nakagoshi
Title: Stochastic Approach on Forest Fire Spatial Distribution from Forest Accessibility in Forest Management Units, South Kalimantan Province, Indonesia
Source: Journal of Environmental Protection 5: 517-529
Year: 2014
Keywords: ecology
Abstract: This study explores stochastic approach to analyzing the forest fire spatial distribution from forest accessibility using 2-parameters Weibull distribution model. MODIS firespot data, as a proxy for forest fire location, from 2001 to 2012 was analyzed by correlating its spatial...
Contact: beni.raharjo@gmail.com
FRI Access Number: 96647

Author(s): Rawlings, Nate
Title: Calif. Wildfires Cause Outages, Evacuations
Source: Time.com. 10/7/2013, p1
Year: 2013
Keywords: interface
FRI Access Number: 96896

Title: Developing fire management strategies from traditional ecological knowledge in the absence of local science
Source: Ecology and Society 17(3): 37
Year: 2012
Keywords: ecology
Contact: ckolden@uidaho.edu
FRI Access Number: 96810

Author(s): Regos, Adrian, Aquilue, N#ria, Retana, Javier, De Caceres, Miquel, Brotons, Lluis
Title: Using Unplanned Fires to Help Suppressing Future Large Fires in Mediterranean Forests
Year: 2014
Keywords: fuel management
Contact: adrian.regos@ctfc.es
FRI Access Number: 96795
Author(s): Reichert, J. M., C. M. P. Bervald, M. F. Rodrigues, O. R. Kato
Title: Mechanized land preparation in eastern Amazon in fire-free forest-based fallow systems as alternatives to slash-and-burn practices: Hydraulic and mechanical soil properties
Source: Agriculture, Ecosystems & environment, available online, 2014
Year: 2014
Keywords: soils
Abstract: Soils of the Brazilian Amazon are particularly fragile due to the inherent soil properties, climate conditions, and the management systems adopted in the region. The aim of this study was to evaluate changes in the mechanical properties and water retention of...
Contact: reichert@ufsm.br
FRI Access Number: 96849

Author(s): Rentch, J. S., Thomas M. Schuler, Gregory J. Nowacki, Nathan R. Beane, W. Mark Ford
Title: Canopy gap dynamics of second-growth red spruce-northern hardwood stands in West Virginia
Source: Forest Ecology and Management 260: 1921-1929
Year: 2010
Keywords: ecology
Abstract: Forest restoration requires an understanding of the natural disturbance regime of the target community and estimates of the historic range of variability of ecosystem components (composition, structure, and disturbance processes). Management prescriptions that support specific restoration activities should be consistent with these parameters...
Contact: jrentch2@wvu.edu
FRI Access Number: 96634

Author(s): Revchuk, Alex D. and I. H. Suffet
Title: Effect of wildfires on physicochemical changes of watershed dissolved organic matter
Year: 2014
Keywords: soils
Abstract: Physicochemical characterization of dissolved organic carbon (DOC) provides essential data to describe watershed characteristics after drastic changes caused by wildfires. Post-fire watershed behavior is important for water source selection, management, and drinking water treatment optimization. Usi...
Contact: msuffet@ucla.edu

Author(s): Ricardo M. Trigo, Pedro M. Sousa, Mario G. Pereira, Domingo Rasillad and Celia M. Gouveiaa
Title: Modelling wildfire activity in Iberia with different atmospheric circulation weather types
Source: INTERNATIONAL JOURNAL OF CLIMATOLOGY, available online, 2013
Year: 2013
Keywords: weather
Abstract: This work focuses on the spatial and temporal variability of burnt area (BA) in the entire Iberian Peninsula (IP) and on the construction of statistical models to reproduce the inter-annual variability. A novel common dataset was assembled for the whole IP by merging the registered BA from 66 administrative regions of both Portugal and Spain. We applied a cluster analysis to identify larger regions with similar fire...
Contact: rmtrigo@fc.ul.pt
FRI Access Number: 96839

Author(s): Richardson, S. J., R. J. Holdaway, F. E. Carswell
Title: Evidence for arrested successional processes after fire in the Waikare River catchment, Te Urewera
Year: 2014
Keywords: ecology new zealand
Abstract: Anthropogenic fire has transformed New Zealand's vegetation. Small-scale historical Maori fires in the forests of Te Urewera National Park, North Island, initiated forest successions that were dominated early on by Kunzea ericoides (Myrtaceae), and later by...
Contact: richardsons@landcareresearch.co.nz
FRI Access Number: 96733

Author(s): Rice, Stephen, Markus Stoffel, Jens M. Turowski
Title: Disturbance regimes at the interface of geomorphology and ecology
Source: Earth Surface Processes and Landforms 37(15): 1678-1682
Year: 2012
Keywords: geology ecology
Abstract: Geomorphological processes are an integral part of ecosystem functioning and ecosystem functioning affects geomorphological processes. Increasingly widespread acknowledgement of this simple idea is manifest in a vigorous research community engaged with questions that address the two-way interaction between biota and geomorphology...
Contact: s.rice@lboro.ac.uk
FRI Access Number: 92538

Author(s): RIORDAN, CHARLES
Title: CALMING THE FIRE: HOW A NEGLIGENCE STANDARD AND BROAD COST-RECOVERY CAN HELP RESTORE NATIONAL FORESTS AFTER WILDFIRES.
Source: Boston College Environmental Affairs Law Review 41(1): 233-264
Year: 2014
Keywords: economics
FRI Access Number: 96916

Author(s): Ritchie, M. W., E. E. Knapp
Title: Establishment of a Long-Term Fire Salvage Study in an Interior Ponderosa Pine Forest
Source: Journal of Forestry, available online 2014
Year: 2014
Abstract: An experiment designed to evaluate the treatment effects of salvaging merchantable fire-killed trees on surface fuels and regeneration was established after a wildfire in northeastern California. The study was then monitored for 10 years. Surface fuel accumulations were...

Author(s): Robson, B. J., E.T. Chester, T.G. Matthews, B.D. Mitchell
Title: Disturbance and the role of refuges in mediterranean climate streams
Source: Hydrobiologia 719: 77-91
Year: 2013
Keywords: ecology wetlands
Abstract: Refuges protect plant and animal populations from disturbance. Knowledge of refuges from disturbance in mediterranean climate rivers (med-rivers) has increased the last decade. We review disturbance processes and their relationship to refuges in streams in mediterranean climate regions (med-regions). Med-river fauna show high endemicity and their populations are often exposed to disturbance; hence the critical importance of refuges...
Contact: b.robson@murdoch.edu.au
FRI Access Number: 95278

Author(s): Rocca, Monique E., Peter M. Brown, Lee H. MacDonald, Christian M. Carrico
Title: Climate change impacts on fire regimes and key ecosystem services in Rocky Mountain forests
Source: Forest Ecology and Management, Available online 28 April 2014, Pages
Year: 2014
Keywords: climate ecology
Abstract: Forests and woodlands in the central Rocky Mountains span broad gradients in climate, elevation, and other environmental conditions, and therefore encompass a great diversity of species, ecosystem productivities, and fire regimes. The objectives of this review are: (1) to characterize the likely short- and longer-term effects of projected climate changes on fuel dynamics and fire regimes for four generalized forest types in the Rocky Mountain region; (2) to review...
Contact: Monique.Rocca@colostate.edu

Author(s): Rochoux, M. C., B. Delmotte, S. M. Ricci, B. Cuenot, A. Trouve, S. Massart, R. Paoli
Title: Towards a Data-Driven Simulation of Wildfire Spread: A Data Assimilation Methodology for Parameter Calibration
Source: AGU Fall Meeting Abstracts 12/2011
Year: 2011
Keywords: modeling
Abstract: Despite recent progress in wildfire spread modeling, operational models are far from being predictive. Due to the fire complexity and computational requirements, they cannot integrate all the multi-scale multi-physics processes involved in a wildfire. Instead, they are mainly based on a parameterization of the Rate Of Spread (ROS) in terms of input data that
characterize the vegetation, the wind conditions and the terrain topography. The models rely on parameters that are...

**FRI Access Number:** 95206

**Author(s):** Rodriguez-Buritica, Susana, Suding, Katharine  
**Title:** Interactive effects of temporal and spatial fire characteristics on the population dynamics of a fire-dependent Cypress species  
**Source:** Journal of applied ecology 50(4): 929-938  
**Year:** 2013  
**Keywords:** ecology  
**Contact:** susanarburitica@email.arizona.edu  
**FRI Access Number:** 96827

**Author(s):** Rodrigo, Anselm A., Xavier Arnan, Javier Retana  
**Title:** Relevance of soil seed bank and seed rain to immediate seed supply after a large wildfire  
**Source:** International Journal of Wildland Fire 03/2012  
**Year:** 2012  
**Keywords:** seeds regeneration  
**Abstract:** We examined the density and composition of the immediate seed supply (i.e. instant potential post-fire germination from soil seed bank and off-site seed rain) after a large wildfire in a sub-Mediterranean pine forest. We also tested the effects of fire severity and distance from unburned edges on the density and composition of the seed bank...  
**Contact:** x.arnan@creaf.uab.es  
**FRI Access Number:** 95265

**Title:** Physical and thermal strain of firefighters according to the firefighting tactics used to suppress wildfires  
**Source:** Ergonomics 54(11): 1101-1108  
**Year:** 2011  
**Keywords:** health firefighters  
**Abstract:** The aim of this study was to analyse the physiological strain of firefighters, using heart rate (HR) and core temperature, during real wildfire suppression according to the type of attack performed (direct, indirect or mixed). Three intensity zones were established according to the HR corresponding to the ventilatory threshold (VT) and respiratory compensation threshold (RCT): zone 1, 5VT; zone 2 (Z2), between VT  
**Contact:** j.marroyo@unileon.es  
**FRI Access Number:** 95264
Author(s): Rodriguez-Marroyo, Jose A, Jorge Lopez-Satue, Raul Pernia, Belen Carballo, Juan Garcia-Lopez, Carl Foster, Jose G Villa
Title: Physiological work demands of Spanish wildland firefighters during wildfire suppression.
Source: International Archives of Occupational and Environmental Health 85(2): 221-228
Year: 2011
Keywords: firefighters health
Abstract: The aim of this study was to analyze the physiological demands and thermal strain of wildland firefighters during real wildfire suppression. The response of core temperature and heart rate (HR) were analyzed in 200 wildland firefighters during...
Contact: j.marroyo@unileon.es
FRI Access Number: 95230

Author(s): Roncoli, Carla, Norman Breuer, David Zierden, Clyde Fraisse, Kenneth Broad, Gerrit Hoogenboom, G Hoogenboom Agweathernet
Title: The art of the science: climate forecasts for wildfire management in the southeastern United States
Source: Climatic Change 113: 1113-1121
Year: 2012
Keywords: climate
Abstract: This article illustrates how a wildfire risk forecast evolved iteratively based on stakeholder consultations. An assessment based on phone interviews indicates that such forecasts can assist fire management decisions, such as deployment of human, financial, and material resources and management of forest, timber, and habitats, and public safety. But careful attention to communication, collaboration, and capacity building is key to realizing this potential...
Contact: carla.roncoli@emory.edu
FRI Access Number: 95258

Author(s): Rosenthal, Mark
Title: Do you use 'hedge words'? 
Source: Two More Chains 4(1): 11-12
Year: 2014
Keywords: communication decision making
FRI Access Number: 96703

Author(s): Rosenburgh, A., J. G. Alday, M. P. K. Harris, K. A. Allen
Title: Changes in peat chemical properties during post-fire succession on blanket bog moorland
Source: Geoderma 211-212: 98-106
Year: 2013
Keywords: peat ecology
Abstract: This study assessed the impact of prescribed burning on the peat properties of moorlands during the post-fire succession in a multi-site study within a major moorland region of Great Britain. Three replicate moorland sites were sampled; all were...
Contact: calluna@liv.ac.uk
FRI Access Number: 96586

Author(s): Rota, Christopher T., Millspaugh, Joshua J., Rumble, Mark A., Lehman, Chad P., Kesler, Dylan C.
Title: The Role of Wildfire, Prescribed Fire, and Mountain Pine Beetle Infestations on the Population Dynamics of Black-Backed Woodpeckers in the Black Hills, South Dakota
Source: PLoS ONE 9(4): 1-10
Year: 2014
Keywords: prescribed burning insects
Contact: rotact@missouri.edu
FRI Access Number: 96786

Author(s): Rozas, Vicente, Gonzalo Perez-de-Lis, Ignacio Garcia-Gonzalez, Jose Ramon Arevalo
Title: Contrasting effects of wildfire and climate on radial growth of Pinus canariensis on windward and leeward slopes on Tenerife, Canary Islands
Source: Trees 01/2011; 25(5):895-905
Year: 2011
Keywords: ecology
Abstract: Little is known concerning the effects of wildfires on tree radial growth and their climatic response under contrasting regimes of fog water inputs on oceanic islands. On Tenerife, Canary Islands, windward slopes are humid with high-fog frequency due to influence of wet trade winds, while climate on leeward slopes is more arid. We used tree-ring records of Pinus canariensis Sweet ex Spreng. to quantify the effects of a fire of known date on radial growth and determine the main...
Contact: vrozas@mbg.cesga.es
FRI Access Number: 96885

Author(s): Rudolph, D. C., D. E. Plair, D. Jones, J. H. Williamson
Title: Restoration and Winter Avian use of Isolated Prairies in Eastern Texas
Source: Southeastern Naturalist 13:
Year: 2014
Keywords: wildlife birds
Abstract: ... These prairies are embedded within the pineywoods vegetation area on sites where a combination of edaphic conditions and a frequent fire regime historically inhibited establishment of woody vegetation (Diggs et al. 2006)...
Contact: crudolph01@fs.fed.us
FRI Access Number: 96902
Current Titles in Wildland Fire, July, 2014

Author(s): Russoa, L., P. Russob, D. Vakalisc, C. Siettos
Title: Detecting Weak Points of Wildland Fire Spread: A Cellular Automata Model Risk Assessment Simulation Approach
Source: CHEMICAL ENGINEERING 36: 253-258
Year: 2014
Keywords: behavior modeling
Abstract: In this work, we propose a risk-assessment approach based on Cellular Automata (CA) simulations which incorporate both theoretical/first principles and (semi) empirical fire behavioural models. The proposed approach can deal with spatial heterogeneity in both...
Contact: ksiet@mail.ntua.gr
FRI Access Number: 96648

Author(s): Saah, D. S., M. Moritz, D. J. Ganz, P. A. Stine, T. Moody
Title: Greenhouse Gas and Criteria Air Pollutant Emission Reductions from Forest Fuel Treatment Projects in Placer County, California
Source: AGU Fall Meeting Abstracts 12010
Year: 2010
Keywords: smoke
Abstract: Years of successful fire suppression activities have left forests unnaturally dense, overstocked, and with high hazardous fuel loads. Wildfires, particularly those of high severity, may dramatically reduce carbon stocks and convert forested lands from carbon sinks to decades-long carbon sources. Forest resource managers are currently pursuing...

Author(s): Saito, M., S. Luyssaert, B. Poulter, M. Williams, P. Ciais, Valentin Bellassen, Casey M. Ryan, Chao Yue, Patricia Cadule and Philippe Peylin
Title: Fire regimes and variability in aboveground woody biomass in miombo woodland
Source: Journal of Geophysical Research, available online 2014
Year: 2014
Keywords: ecology tropics
Abstract: This study combined a process-based ecosystem model with a fire regime model to understand the effect of changes in fire regime and climate pattern on woody plants of miombo woodland in African savanna. Miombo woodland covers wide areas in Africa and...
Contact: saito.makoto@nies.go.jp

Author(s): Salloum, L. and G. Mitri
Title: Assessment of the temporal pattern of fire activity and weather variability in Lebanon
Source: International Journal of Wildland Fire, Available online 2014
Year: 2014
Keywords: weather
Abstract: The aim of this work was to investigate the yearly temporal pattern of fire activity and its relationship to weather in Lebanon during the past decade. The specific objectives were (1) to determine the start, peak and end dates of the fire season and their temporal...
**Current Titles in Wildland Fire, July, 2014**

**Author(s):** Santana, Victor M., Josu G. Alday and M. Jaime Baeza  
**Title:** Effects of fire regime shift in Mediterranean Basin ecosystems: changes in soil seed bank composition among functional types  
**Source:** plant ecology, available online 2014  
**Year:** 2014  
**Keywords:** ecology regeneration  
**Abstract:** We studied the soil seed bank in a possible scenario of fire regime shift and asked: (1) Does high fire frequency impact the density of seeds stored, species richness and evenness? (2) Overall, does high fire frequency produce changes in the presence-absence and abundance of species...  
**Contact:** vm.santana@ua.es  
**FRI Access Number:** 96239

**Author(s):** Santana, Modesto Castrillon, Pedro A. Jorge, Ignacio J. Lopez, Adrian Macias, D. Martin, Rafael J. Nebot, Izzat Sabbagh, F. M. Quintana, Javier Sanchez, Antonio J. Sanchez, Jose P. Suarez, Agustin Trujillo  
**Title:** Forecasting and visualization of wildfires in a 3D geographical information system  
**Source:** Computers and Geosciences 37: 390-396  
**Year:** 2011  
**Keywords:** detection  
**Abstract:** This paper describes a wildfire forecasting application based on a 3D virtual environment and a fire simulation engine. A novel open-source framework is presented for the development of 3D graphics applications over large geographic areas, offering high performance 3D visualization and powerful interaction tools for the Geographic...  
**Contact:** mcastrillon@siani.es  
**FRI Access Number:** 92539

**Author(s):** Sarris, D., N. Koutsias, A. Christopoulou, E. Angelonidi  
**Title:** Ecological and climatic drivers for the fire regime in the Mediterranean under climatic change  
**Source:** Unknown Source, 2 pages  
**Year:** 2014  
**Keywords:** climate  
**Contact:** disarris@cc.uoi.gr  
**FRI Access Number:** 96737

**Author(s):** Schaefe, J., D. Laylander, S. Andrews, J. Daniels  
**Title:** Identifying, Dating, and Explaining Fire-Affected Rock Features in the Western Colorado Desert, Alta California  
**Source:** California Archaeology 6(1): 65-94  
**Year:** 2014  
**Keywords:** Archeology
Abstract: Many hundreds of small features composed of fire-affected rock (FAR), often with no other cultural remains in proximity to them, have been documented along or within a few kilometers of the maximum+ 12-m shoreline of ancient Lake Cahuilla in southwestern...

FRI Access Number: 96722

Title: HYDROLOGIC CONDITIONS AND TERRESTRIAL LASER SCANNING OF POST-FIREDEBRIS FLOWS IN THE SAN GABRIEL MOUNTAINS, CA, U.S.A
Source: Italian Journal of Engineering Geology and Environment - Book
www.ijege.uniroma1.it, 2011 Casa Editrice Universite La Sapienza
Year: 2011
Keywords: hydrology soils
FRI Access Number: 96811

Author(s): Schunke, E.
Title: The ABA area: birds and bird conservation in Hawaii
Source: Winging It 23(5): 3-6
Year: 2011
Keywords: ecology wildlife birds

Author(s): Schafer, Ralf Bernhard, Laurence Hearn, Ben J. Kefford, Jochen F. Mueller, Dayanthi Nugegoda
Title: Using silicone passive samplers to detect polycyclic aromatic hydrocarbons from wildfires in streams and potential acute effects for invertebrate communities
Year: 2010
Keywords: hydrology
Abstract: Silicone rubber passive samplers spiked with 4 deuterated performance reference compounds were deployed for 29-33 days to estimate the concentrations of 16 polycyclic aromatic hydrocarbons (PAHs) in 9 streams in Victoria, Australia, following a wildfire. Silicone rubber strips of 2 thicknesses were used to obtain information on the status of uptake of the chemicals of interest at retrieval. In addition, we monitored the stream macroinvertebrate community for potential effects of PAHs or other fire organics. All selected PAHs were detected in the passive samplers and the sampling rates ranged from 0.5 to 50 L/day significantly varying between sites but not...
Contact: Ralf.Schaefer@rmit.edu.au
FRI Access Number: 96544

Author(s): Schepers, L., B. Haest, S. Veraverbeke, T. Spanhove
Title: Burned Area Detection and Burn Severity Assessment of a Heathland Fire in Belgium Using Airborne Imaging Spectroscopy (APEX)
Source: Remote Sensing 6: 1803-1826
Year: 2014
**Current Titles in Wildland Fire, July, 2014**

**Keywords:** remote sensing

**Abstract:** Uncontrolled, large fires are a major threat to the biodiversity of protected heath landscapes. The severity of the fire is an important factor influencing vegetation recovery. We used airborne imaging spectroscopy data from the Airborne Prism Experiment (APEX).

**Contact:** lennert.schepers@uantwerpen.be

**FRI Access Number:** 95914

---

**Author(s):** Scott, D. A.

**Title:** Initial Ecosystem Restoration in the Highly Erodible Kisatchie Sandstone Hills

**Source:** Southeastern Naturalist 13: 65-79

**Year:** 2014

**Keywords:** ecology

**Abstract:** Restoration of the unique and diverse habitats of the Kisatchie Sandstone Hills requires the re-introduction of fire to reduce fuel accumulation and promote herbaceous vegetation, but some soils in the area are extremely erodible, and past fires have resulted in high erosion...

**Contact:** andyscott@fs.fed.us

**FRI Access Number:** 96894

---

**Author(s):** Sergio Alegre Prats, Maruxa Cortizo Malvar, Diana Catarina Simoes Vieira, Lee MacDonald, Jan Jacob Keizer

**Title:** EFFECTIVENESS OF HYDROMULCHING TO REDUCE RUNOFF AND EROSION IN A RECENTLY BURNT PINE PLANTATION IN CENTRAL PORTUGAL

**Source:** Land Degrad. Develop. (2013), published online, 2013

**Year:** 2013

**Keywords:** restoration

**Contact:** chariarv@rdat.iitd.ac.in

**FRI Access Number:** 95937

---

**Author(s):** Sharma, Naresh Kr., Vijayaraghavan M. Chariar and Rajendra Prasad

**Title:** Impact of fire on Dendrocalamus strictus - a natural green composite building material

**Source:** Indoor and Built Environment. published 26 May 2014, 10.1177/1420326X14535793

**Year:** 2014

**Keywords:** ecology bamboo

**Contact:** chariarv@rdat.iitd.ac.in

---

**Author(s):** Shaposhnikov, Dmitry, Boris Revich, Goran Pershagen

**Title:** Mortality related to air pollution with the moscow heat wave and wildfire of 2010

**Source:** Epidemiology 25(3):359

**Year:** 2014

**Keywords:** smoke

**Abstract:** We analyzed day-to-day variations in the number of deaths in Moscow, Russia, in relation to air pollution levels and temperature during the disastrous heat wave and wildfire of 2010. Corresponding data for the period 2006-2009 were used for comparison. Daily average levels of PM10 and ozone were obt...
FRI Access Number: 96784

Author(s): Shanthi, S., J. G. Christober
Title: Detection of Fire Flow in Videos by SVM Classifier with EM-Segmentation Method
Source: Unknown source
Year: 2014
Keywords: detection remote sensing
Abstract: In the past decennary computational vision based flame detection has focused significantly with a camera surveillance system omnipresent, whereas many penetrative features such as colour, shape, texture, etc., have been employed in the literature. This...
Contact: shan.sece@gmail.com
FRI Access Number: 96650

Author(s): Shindler, B., C. Olsen, S. McCaffrey, B. McFarlane, A. Christianson, T. McGee, A. Curtis, and E. Sharp
Title: Trust: A planning guide for wildfire agencies and practitioners
Source: Research and Management Experience in Australia, Canada, and the United States. A Joint Fire Science Program Research Publication. Oregon State University, Corvallis, OR
Year: 2014
Keywords: interface planning
FRI Access Number: 96700

Author(s): Smith, A. L., C. M. Bull, M. G. Gardner, D. A. Driscoll
Title: Life history influences how fire affects genetic diversity in two lizard species
Source: Molecular Ecology, available online 2014
Year: 2014
Keywords: ecology genetics
Abstract: 'Fire mosaics' are often maintained in landscapes to promote successional diversity in vegetation with little understanding of how this will affect ecological processes in animal populations such as dispersal, social organisation and re-establishment. To investigate...
Contact: annabel.smith@anu.edu.au

Author(s): Smith, Annabel L., David Blair, Lachlan McBurney, Sam C. Banks, Philip S. Barton, Wade Blanchard, Don A. Driscoll, A. Malcolm Gill, and David B. Lindemayer
Title: Dominant Drivers of Seedling Establishment in a Fire-Dependent Obligate Seeder: Climate or Fire Regimes?
Source: Ecosystems (2014) 17: 258-270
Year: 2014
Keywords: ecology regeneration australia
Abstract: Climate change is causing fire regime shifts in ecosystems worldwide. Plant species with regeneration strategies strongly linked to a fire regime, such as obligate seeders, may be particularly threatened by these changes. It is unclear whether changes in fire regimes or the direct effects of climate...
Contact: annabel.smith@anu.edu.au
Current Titles in Wildland Fire, July, 2014

FRI Access Number: 96874

**Author(s):** Smith, A. L., C. M. Bull, M. G. Gardner, D. A. Driscoll  
**Title:** Life history influences how fire affects genetic diversity in two lizard species  
**Source:** Molecular Ecology, available online, 2014  
**Year:** 2014  
**Abstract:** 'Fire mosaics' are often maintained in landscapes to promote successional diversity in vegetation with little understanding of how this will affect ecological processes in animal populations such as dispersal, social organisation and re-establishment. To investigate...  
**Contact:** annabel.smith@anu.edu.au  
FRI Access Number: 96804

**Author(s):** Sokos, Christos  
**Title:** Carnivores in burned and adjacent unburned areas in a Mediterranean ecosystem  
**Source:** Mammalia 76(4): 407-415  
**Year:** 2012  
**Keywords:** wildlife ecology  
**Abstract:** Wildfire is a major disturbance factor that affects wildlife both directly and indirectly. To better understand its influence, carnivore mammals were monitored using scent stations, inside and outside a burned area of a typical Mediterranean ecosystem of Northern Hellas, in the second and third summers post-fire. The main Carnivora species in the study area...  
**Contact:** birtzas@teilar.gr  
FRI Access Number: 95287

**Author(s):** Solomon, R.  
**Title:** METHOD FOR MIXING FIRE FIGHTING GEL IN SITU WITHIN A WATER TANK OF A FIRE FIGHTING AIRCRAFT, AND A FIRE FIGHTING AIRCRAFT MODIFIED IN..  
**Source:** US Patent 20,140,124,223, 2014  
**Year:** 2014  
**Keywords:** retardant aircraft equipment  
**Abstract:** A method for mixing fire fighting gel in situ within a water tank of a fire fighting aircraft. A first step involves mounting a chemical tank to a fire fighting aircraft having a water tank. A second step involves injecting gel forming chemical from the chemical tank into a turbulent flow of...  
FRI Access Number: 96754

**Author(s):** Sorensen, C. D., A. J. Finkral, T. E. Kolb, C. H. Huang  
**Title:** Short and long-term effects of thinning and prescribed fire on carbon stocks in ponderosa pine stands in northern Arizona  
**Source:** Fuel and EnergyAbstracts 261(3): 460-472  
**Year:** 2011  
**Keywords:** silviculture prescribed burning soils
Abstract: Euro-American logging practices, intensive grazing, and fire suppression have increased the amount of carbon that is stored in ponderosa pine (Pinus ponderosa Dougl. Ex Laws) forests in the southwestern United States. Current stand conditions leave these forests prone to high-intensity wildfire, which releases a pulse of carbon emissions and shifts carbon storage from live trees to standing dead trees and woody debris. Thinning and...

Contact: christopherd.sorensen@gmail.com
FRI Access Number: 95227

Author(s): Southon, G. E., Green E. R., Jones A. G., Barker C., Power S. A
Title: Long-term nitrogen additions increase likelihood of climate stress and affect recovery from wildfire in a lowland heath
Source: Global Change Biology 18(9): 2824-2837
Year: 2012
Keywords: climate
Abstract: Increases in the emissions and associated atmospheric deposition of nitrogen (N) have the potential to cause significant changes to the structure and function of N-limited ecosystems. Here, we present the results of a long-term (13 year) experiment assessing the impacts of N addition (30 kg ha A1 yr A1) on a UK lowland heathland under a wide range of environmental conditions, including the occurrence of prolonged...

Contact: s.power@imperial.ac.uk
FRI Access Number: 95243

Author(s): Spanos, I., P. Ganatsas, M. Tsakaldimi
Title: EVALUATION OF POSTFIRE RESTORATION IN SUBURBAN FOREST OF THESSALONIKI, NORTHERN GREECE
Source: GlobalNEST International Journal 12:390-400
Year: 2010
Keywords: restoration
Abstract: Postfire plantation results and pattern of natural revegetation process were monitored for six years after wildfire in the artificial Pinus brutia forest of the suburban park of Thessaloniki, northern Greece. Some flood-preventing treatments and plantings took place on half of the burned area immediately after the fire, while the rest of the burned...

Contact: pgana@for.auth.gr
FRI Access Number: 96635

Author(s): Stidham, Melanie, Sarah McCaffrey, Eric Toman, Bruce Shindler
Title: Policy tools to encourage community-level defensible space in the United States: A tale of six communities
Source: Journal of Rural Studies 35: 59-69
Year: 2014
Keywords: policy interface
Abstract: Within the wildland-urban interface (WUI), wildfire risk contains both individual and collective components. The likelihood that a particular home will be threatened by wildfire in any given year is low, but at a broader scale the likelihood that a home somewhere in the
WUI will be threatened is substantially higher. From a risk mitigation perspective, individuals may take a number of...

**Contact:** stidham.39@osu.edu

**FRI Access Number:** 96746

**Author(s):** Stipanicev, Darko, Marin Bugari, Ljiljana Seri, Toni Jakovcevi

**Title:** Web GIS Technologies in Advanced Cloud Computing Based Wildfire Monitoring System

**Source:** The 5th International Wildland Fire Conference, Sun City, South Africa, 9-13 May 2011

**Year:** 2011

**Keywords:** Technology

**Abstract:** Wildfires are natural phenomena that cause significant economic damage. Apart from preventive measures, early fire detection on one side and quick and appropriate intervention on the other, are measures of vital importance for wildfire damage minimization. Therefore the wildfire monitoring and surveillance is quite important...

**Contact:** darko.stipanicevfesb.hr

**FRI Access Number:** 95166

**Author(s):** Stursova, Martina, Jaroslav Snajdr, Tomas Cajthaml, Jiri Barta, Hana Santruckova and Petr Baldrian

**Title:** When the forest dies: The response of forest soil fungi to a bark beetle-induced tree dieback

**Source:** The ISME Journal, (27 March 2014) | doi:10.1038/ismej.2014.37

**Year:** 2014

**Keywords:** soils fungi ecology insects

**Abstract:** Coniferous forests cover extensive areas of the boreal and temperate zones. Owing to their primary production and C storage, they have an important role in the global carbon balance. Forest disturbances such as forest fires, windthrows or insect pest outbreaks have a substantial effect on the functioning of these ecosystems. Recent decades have seen an increase in the areas

**Author(s):** Suarez, N. M., Betancor E., Fregel R., Pestano J.

**Title:** Genetic signature of a severe forest fire on the endangered Gran Canaria blue chaffinch (Fringilla teydea polatzeki)

**Source:** Conservation Genetics 13(2): 499-50

**Year:** 2012

**Keywords:** genetics

**Abstract:** Habitat destruction has been identified as one of the main threats to biodiversity. Among all factors causing habitat disturbance, wildfire is recognized as one of the most important ecological forces that influences not only the physical environment, but also the structure and composition of floral and faunal communities. These processes...

**Contact:** nmartel@dbbf.ulpgc.es

**FRI Access Number:** 95234
Author(s): Suderman, J., T. Lead, S. J. L. Sani, S. Jansen
Title: Dear Mr. Ault and Mr. Campbell, Subject: Wildfire Foam Delivery System-Phase 2 Deliverables Burnout Fire Suppression Systems is pleased to submit the conceptual...
Source: Burnout Fire Suppression Systems, 45 pages
Year: 2014
Keywords: retardant equipment
Abstract: The purpose of this project is to design a foam delivery system to lay a continuous line of wet foam over a 1-2 km stretch of land. A successful design must be capable of proportioning water and foam concentrate, mixing the two to form a uniform solution, aerating the...
FRI Access Number: 96727

Author(s): Symstad, Amy J., Wesley E. Newton, Daniel J. Swanson
Title: Strategies for preventing invasive plant outbreaks after prescribed fire in ponderosa pine forest
Source: Forest Ecology and Management, Available online 10 May 2014
Year: 2014
Keywords: prescribed burning exotics
Contact: asymstad@usgs.gov

Author(s): Symstad, Amy J., Daniel J. Swanson and Wesley E. Newton
Title: Strategies to reduce invasive plant outbreaks after prescribed fire in black hills pine forest
Source: Poster
Year: 2014
Keywords: prescribed burning exotics
Contact: asymstad@usgs.gov
FRI Access Number: 96761

Author(s): Tapaswini, S. and S. Chakraverty
Title: Non-probabilistic uncertainty analysis of forest fire model by solving fuzzy hyperbolic reaction-diffusion equation
Source: Fire Safety Journal, available online, 2014
Year: 2014
Keywords: modeling
Abstract: This paper investigates the uncertain rate of burning trees by solving fuzzy hyperbolic reaction-diffusion equation with different uncertain initial conditions. Uncertainties present in the initial conditions are modelled through trapezoidal and...
Contact: smitatapaswini@gmail.com
FRI Access Number: 96826
Author(s): Tax, N., E. Prestat, J. W. McFarland, K. P. Wickland, R. Knight
Title: Impact of fire on active layer and permafrost microbial communities and metagenomes in an upland Alaskan boreal forest
Source: The ISME Journal
Year: 2014
Keywords: ecology microbes
Abstract: Permafrost soils are large reservoirs of potentially labile carbon (C). Understanding the dynamics of C release from these soils requires us to account for the impact of wildfires, which are increasing in frequency as the climate changes. Boreal wildfires contribute to...
Contact: jrjansson@lbl.gov %o fire research institute, pdf number 96728

Author(s): Tempel, D., R. R. J. Gutierrez, S. Whitmore, M. Reetz
Title: Effects of Forest Management on California Spotted Owls: Implications for Reducing Wildfire Risk in Fire-prone Forests
Source: Ecological Applications, available online 2014
Year: 2014
Keywords: wildlife birds owls rare endangered
Abstract: Management of many North American forests is challenged by the need to balance the potentially competing objectives of reducing risks posed by high-severity wildfires and protecting threatened species. In the Sierra Nevada, California, concern about high-...
Contact: dtempel@wisc.edu
FRI Access Number: 96777

Author(s): Theobald, D. R.
Title: EVALUATION OF RED ALDER MORTALITY IN THE LITTLE CREEK WATERSHED FOLLOWING THE 2009 LOCKHEED FIRE
Source: M. S. Thesis, Cal Poly University, San Luis Obispo, California, 73 pages
Year: 2014
Keywords: ecology
Abstract: Five hundred eighty red alder along a 2.16 km portion of the Little Creek riparian zone were assessed for mortality following the 2009 Lockheed Fire near Davenport, California. The study area was divided into burn severity zones and every red alder within...
FRI Access Number: 96645

Author(s): Thurston, W., R. J. B. Fawcett, K. J. Tory, J. D. Kepert
Title: UNDERSTANDING COMPLEX FIRE BEHAVIOUR: MODELLING INVESTIGATION OF LOFTING PHENOMENA AND WIND VARIABILITY
Source: Bushrie CRC, Australian Government, Bureau of Meteorology, 84 pages
Year: 2014
Keywords: behavior
Abstract: This project investigates two meteorological contributions to complex fire behaviour: (i) wind direction variability, known to broaden fire fronts leading to more rapid fire propagation, and (ii) wind influence on fire plume structure, with emphasis on...
FRI Access Number: 96724
Author(s): Tolme, Paul
Title: WILDLIFE FEELS THE HEAT
Source: National Wildlife 51(5): 1
Year: 2013
Keywords: wildlife ecology
FRI Access Number: 96912

Author(s): TORRE, I., A. ARRIZABALAGA, C. FELIU, A. RIBAS
Title: The helminth infracommunities of the wood mouse (Apodemus sylvaticus) two years after the fire in Mediterranean forests
Source: HELMINTHOLOGIA 50(1): 27-38
Year: 2013
Keywords: wildlife mice
Abstract: Parasites have been recognized as indicators for natural or man-induced environmental stress and perturbation. In this article, we investigated the role of two non-exclusive hypotheses on the response of helminths of wood mice to fire perturbation: 1) a reduction of the helminth...
FRI Access Number: 96858

Author(s): Torri, D., A. Blonda, F. Chaabane, K. Dimitropoulos, F. Tsalakaniidou and N. Grammalidis
Title: Fire detection, fuel model estimation and fire propagation estimation/visualization for the protection of Cultural Heritage
Year: 2011
Keywords: detection
FRI Access Number: 95197

Author(s): Trollope, W., B. van Wilgen, L. A. Trollope, N. Govender
Title: The long-term effect of fire and grazing by wildlife on range condition in moist and arid savannas in the Kruger National Park
Year: 2014
Keywords: wildlife Ecology
Abstract: Few assessments of the effects of fire and grazing on the herbaceous components of savannas have been reported for Africa. In the Kruger National Park, South Africa, range condition was monitored at three savanna sites spanning a rainfall gradient of 450 to 700...
Contact: winfire@procomp.co.za

Author(s): Turquety, S., L. Menut, B. Bessagnet, A. Anav, N. Viovy
Title: APIFLAME v1. 0: high-resolution fire emission model and application to the Euro-Mediterranean region
Current Titles in Wildland Fire, July, 2014

Source: Geoscientific Model Development 7: 587-612
Year: 2014
Keywords: modeling
Abstract: This paper describes a new model for the calculation of daily, high-resolution (up to 1 km) fire emissions, developed in the framework of the APIFLAME (Analysis and Prediction of the Impact of Fires on Air quality ModEling) project. The methodology relies on the...
Contact: solene.turquety@lmd.polytechnique.fr
FRI Access Number: 96731

Author(s): Twidwell, D., J. M. Meza, C. J. Turney, W. E. Rogers
Title: Does Prescribed Fire Facilitate Fire Ant Invasions in Coastal Prairies or Aid Management by Improving Mound Search Efforts?
Source: Southeastern Naturalist 13: 93-104
Year: 2014
Keywords: prescribed burning insects ants
Abstract: We established a high-intensity prescribed-fire experiment in shrub-dominated coastal prairie to quantify (1) the proportion of Red Imported Fire Ant mounds that are likely to be missed by applicators of individual mound-based chemical treatments in prairie,...
Contact: dirac.twidwell@uni.edu

Author(s): Tyler L. Lewis, Mark S. Lindberg, Joel A. Schmutz, and Mark R. Bertram
Title: Multi-trophic resilience of boreal lake ecosystems to forest fires
Source: Ecology 95(5): 1253-1263
Year: 2014
Keywords: wetlands ecology
Abstract: Fires are the major natural disturbance in the boreal forest, and their frequency and intensity will likely increase as the climate warms. Terrestrial nutrients released by fires may be transported to boreal lakes, stimulating increased primary productivity, which may radiate through multiple trophic levels. Using a before-after-control-impact (BACI) design, with pre- and postfire data from burned and unburned areas, we examined effects of a natural fire across several trophic levels of boreal lakes, from nutrient and chlorophyll levels, to macroinvertebrates, to waterbirds. Concentrations...
Contact: tlewis@alaska.edu
FRI Access Number: 96901

Author(s): Uribe, R. Inclan, D.M. Sanchez, M.A. Clavero, A.M. Fernandez, R. Morante, A. Cardena, A. Blanco, H. Van Miegroet
Title: Effects of wildfire on soil respiration in three typical Mediterranean forest ecosystems in Madrid, Spain
Source: Plant and Soil, available online, 2013
Year: 2013
Keywords: soils
Abstract: We found long term effects of wildfires on the physical, chemical and biological soil characteristics, which in turn affected soil respiration. The response of soil respiration to
temperature was controlled by moisture and changed with ecosystem type, season, and between B and NB sites. Lower...

**Contact:** carla.uribe@ciemat.es

**FRI Access Number:** 95203

**Author(s):** Ursino, N.

**Title:** Eco-hydrology driven fire regime in savanna

**Source:** Journal of Theoretical Biology 355: 68-76

**Year:** 2014

**Keywords:** hydrology

**Abstract:** Fire is an important evolutionary force and ecosystem consumer that shapes savanna composition. However, ecologists have not comprehensively explained the functioning and maintenance of flammable savannas. A new minimal model accounting...

**Contact:** nadia.ursino@unipd.it

**FRI Access Number:** 96781

**Author(s):** Valentine, L. E., R. Fisher, B. A. Wilson, T. Sonneman

**Title:** Time since fire influences food resources for an endangered species, Carnaby's cockatoo, in a fire-prone landscape

**Source:** Biological Conservation, available online 2014

**Year:** 2014

**Keywords:** rare endangered wildlife birds cockatoo

**Abstract:** Where threatened species persist in multiple use landscapes, management activities, such as prescribed burning, may influence the availability of resources for those species. We examined how time since fire can influence food resources for the...

**Contact:** Leonie.Valentine@uwa.edu.au

**Author(s):** Val Martin, Maria, Ralph A. Kahn, Jennifer A. Logan, Ronan Paugam, Martin Wooster and Charles Ichoku

**Title:** Space-based observational constraints for 1-D fire smoke plume-rise models

**Source:** Journal OF GEOPHYSICAL RESEARCH, VOL. 117, D22204, doi: 10.1029/2012JD018370, 2012

**Year:** 2012

**Keywords:** smoke

**Abstract:** We use a plume height climatology derived from space-based Multiangle Imaging Spectroradiometer (MISR) observations to evaluate the performance of a widely used plume-rise model. We initialize the model with assimilated meteorological fields from the NASA Goddard Earth Observing System and estimated fuel moisture content at the location and time of the MISR measurements...

**Contact:** mval@atmos.colostate.edu

**FRI Access Number:** 95213
Author(s): van Langevelde, Frank, Casper de Groot, Thomas A. Groen, Ignas M. A. Heitkonig and Ian Gaigher
Title: Effect of patches of woody vegetation on the role of fire in tropical grasslands and savannas
Year: 2014
Keywords: grasslands tropics
Abstract: In tropical grasslands and savannas, fire is used to reduce woody vegetation expansion. Woody vegetation in these biomes is often patchily distributed with unknown consequences for fire effects. Tree seedlings at the leeward side of wooded patches were less affected by fire, suggesting a "safe zone" promoting woody vegetation expansion.
Contact: frank.vanlangevelde@wur.nl
FRI Access Number: 96715

Author(s): Vaz, Pedro G., Paulo Pinto, Francisco Rego, Christopher Robinson
Title: Impact of Coarse Woody Debris Input in Contrasting Burned Forests on Stream Physical Attributes: A Mediterranean Perspective of the Long-Term Role of Fire
Source: 2010 Summer Meeting. Joint Meeting with ASLO & NABS. Aquatic Sciences: Global Changes from the Center to the Edge, Santa Fe, New Mexico, USA; 06/2010
Year: 2010
Keywords: wetlands ecology
Abstract: This study assessed long-term effects of wildfires on aquatic ecosystems in the Mediterranean Basin, Portugal. Among Mediterranean countries, Portugal is prominently targeted by wildfires. Since 1990, more than 25% of the country burned and in 2003 and 2005 the burnt area was maximal and created the need and opportunity for this ongoing study. In Central Portugal, 9 sub-basins burnt between 2003 and 2007, dominated by eucalyptus (euc), maritime pine (mpn) and...
Contact: zasvaz@gmail.com

Author(s): Veldman, J. W., L. A. Brudvig, E. I. Damschen, J. L. Orrock, W. Brett Mattingly and Joan L. Walker
Title: Fire frequency, agricultural history and the multivariate control of pine savanna understory plant diversity
Source: Journal of Vegetation Science, available online 2014
Year: 2014
Keywords: frequency ecology grasslands
Abstract: We use structural equation modelling (SEM) to evaluate the relationships among six groups of predictor variables and their influence on local-scale species richness in pine savannas at 256 sites from three locations in the southeastern USA. In the model, fire...
Contact: jveldman@wisc.edu
FRI Access Number: 96928

Author(s): Vergnoux, A., M. Guiliano, R. Di Rocco, M. Domeizel, F. Theraulaz, P. Doumenq
Title: Quantitative and mid-infrared changes of humic substances from burned soils
**Source:** Environmental Research 111(2): 205-214  
**Year:** 2010  
**Keywords:** soils  
**Abstract:** The humic substances are an abundant and important part of soil organic matter which plays many roles in ecosystems. On the other hand, forest fires are known to have a potential impact on the soil organic matter. Consequently, we chose to study the impact of forest fires on humic substances and the three relevant fractions, e.g. humic acids (HA), fulvic acids (FA) and non-humified fraction (NHF), NHF being the fulvic acids not adsorbed on XA-D8 resins. The studied site is a Mediterranean...  
**Contact:** aurore.vergnoux@hotmail.com  
**FRI Access Number:** 96870

**Author(s):** Vicente, A., Alves C., Calvo A. I, Fernandes A. P, Nunes T., Monteiro C., Almeida S. M., Pio C.  
**Title:** Emission factors and detailed chemical composition of smoke particles from the 2010 wildfire season in central Portugal.  
**Source:** Atmospheric Environment 71: 295  
**Year:** 2013  
**Keywords:** smoke  
**Abstract:** This paper complements the information previously published (Atmospheric Environment 45, 641-649) on gaseous and particulate emissions from wildfires in Portugal for summer 2009, in an attempt at obtaining more extensive, complete and representative databases on emission factors and detailed chemical characterisation of smoke particles. Here, emission factors for carbon oxides-  
**Contact:** anavicente@ua.pt  
**FRI Access Number:** 95224

**Author(s):** Vilar, L., H. Nieto, M. P. Martin  
**Title:** Integration of Lightning-and Human-Caused Wildfire Occurrence Models  
**Source:** Human and Ecological Risk Assessment 16(2): 340-364  
**Year:** 2010  
**Keywords:** cause modeling

**Author(s):** Voncina, Andrej, Mitja Ferlan, Klemen Eler, Franc Batic and Dominik Vodnik  
**Title:** Effects of fire on carbon fluxes of a calcareous grassland  
**Source:** International Journal of Wildland Fire 23: 425-434  
**Year:** 2014  
**Keywords:** carbon grasslands  
**Abstract:** The aim of the study was to investigate, using the canopy chamber method, the effect of fire on the recovery of grassland vegetation in terms of C fluxes from and to the ecosystem. Two years of investigation showed that the grassland under study can recover quite quickly after fire, although the dynamics of recovery are largely dependent on water availability.  
**Contact:** andrej.voncina@bf.uni-lj.si
**Current Titles in Wildland Fire, July, 2014**

**FRI Access Number:** 96717

**Author(s):** Wagner, Michael J., Kevin D. Bladon, Uldis Silins, Chris H.S. Williams, Amanda M. Martens, Sarah Boon, Ryan J. MacDonald, Micheal Stone, Monica B. Emelko, Axel Anderson

**Title:** Catchment-scale stream temperature response to land disturbance by wildfire governed by surface-subsurface energy exchange and atmospheric controls

**Source:** Journal of Hydrology, Available online 23 May 2014, Pages

**Year:** 2014

**Keywords:** wetlands

**Abstract:** In 2003, the Lost Creek wildfire severely burned 21,000 hectares of forest on the eastern slopes of the Canadian Rocky Mountains. Seven headwater catchments with varying levels of disturbance (burned, post-fire salvage logged, and unburned) were instrumented as part of the Southern Rockies Watershed Project to measure stream flow, stream temperature, and meteorological conditions. From 2004 to 2010 mean annual stream temperature (Ts) was elevated 0.8 to 2.1xC in the burned...

**Contact:** kbladon@ualberta.ca

---

**Author(s):** Walsh, Bryan and Kate Pickert

**Title:** Southern California Blaze Kicks Off What Could Be Especially Dangerous Wildfire Season

**Source:** Time.com. 5/3/2014, p1

**Year:** 2014

**Keywords:** interface

---

**Author(s):** Waldrop, Thomas A., Brudnak, Lucy, Rideout-Hanzak, Sandra

**Title:** Fuel loading in the Southern Appalachian Mountains may be a function of site quality and decomposition rates


**Year:** 2012

**Keywords:** fuel ecology

---

**Author(s):** Ward, Bruce G., Thomas B. Bragg and Barbara A. Hayes

**Title:** Relationship between fire-return interval and mulga (Acacia aneura) regeneration in the Gibson Desert and Gascoyne-Murchison regions of Western Australia

**Source:** International Journal of Wildland Fire 23: 394-402

**Year:** 2014

**Keywords:** ecology regeneration

**Abstract:** Central Australia has experienced many large summer fires over the past five to six decades. However, over the last two decades increased rainfall promoted herbs and soft
grasses and resulted in higher fire frequency. This study documents the relationship between fire return interval and mulga regeneration.

Contact: bruce.ward@dpaw.wa.gov.au
FRI Access Number: 96713

Title: The effects of fire-flood events on the sediment yield of a coastal California watershed
Source: AGU Fall Meeting Abstracts 12/2010;
Year: 2010
Keywords: soils erosion
Abstract: Wildfire can dramatically alter the physical and geochemical conditions of the landscape and modify rates of runoff and erosion. The occurrence of two large wildfires in the Arroyo Seco watershed (293 km2) of California along with water and sediment sampling before and after both fires provides a unique opportunity to evaluate the watershed-scale...

Author(s): Wells, Gail
Title: Pushing the science harder
Source: Fire Science Digest 18: 2-3
Year: 2014
Keywords: hawaii ecology
FRI Access Number: 96651

Author(s): Wells, Gail
Title: Remote sensing of fuel moisture on Oahu
Source: Fire Science Digest 18: 4
Year: 2014
Keywords: hawaii ecology
FRI Access Number: 96651

Author(s): Wells, Gail
Title: Soil carbon fluxes in southern pine flatwoods
Source: Fire Science Digest 18: 4
Year: 2014
Keywords: hawaii ecology
FRI Access Number: 96651

Author(s): Wells, Gail
Title: Bridging boundaries and forming opinions on climate change science
Source: Fire Science Digest 18: 5-6
Year: 2014
Keywords: hawaii ecology
FRI Access Number: 96651
Current Titles in Wildland Fire, July, 2014

Author(s): Wells, Gail
Title: Discovering past fire severity in charcoal deposits
Source: Fire Science Digest 18: 6-7
Year: 2014
Keywords: hawaii ecology
FRI Access Number: 96651

Author(s): Wells, Gail
Title: Edge effects in florida cypress wetlands
Source: Fire Science Digest 18:8-9
Year: 2014
Keywords: hawaii ecology
FRI Access Number: 96651

Author(s): Wells, Gail
Title: Changing spatial patterns of fire severity?
Source: Fire Science Digest 18: 9-10
Year: 2014
Keywords: hawaii ecology
FRI Access Number: 96651

Author(s): Wendel, J. A.
Title: Obama administration outlines new strategy for wildfire season
Source: Eos, Transactions American Geophysical Union
Year: 2014
Keywords: policy
Abstract: As the wildfire season approaches, the Obama administration has released its new National Cohesive Wildland Fire Management Strategy, developed by federal, state, tribal, and community partners...

Author(s): Wessinger, J. C.
Title: Forest Fire Lookouts in the North Cascades: from Utilitarian Sentry to Writer's Refuge
Source: M. S. Thesis, University of Washington, 89 pages
Year: 2014
Keywords: lookouts detection
Abstract: Beginning in the early 1900s, forest fire lookouts were constructed atop mountains throughout the west in an effort to eradicate forest fires. Each summer, operators in the isolated spaces had the opportunity to become intimately connected to their local...
FRI Access Number: 96704

Author(s): Whicke, Jeffrey J., David Baltz, William F. Eisele, Orval F. Hart, Michael W. McNaughton, Andrew A. Green
Title: Operational experience of continuous air monitoring of smoke for 289Pu during a wildfire
**Current Titles in Wildland Fire, July, 2014**

**Source:** Health physics 103(2 Suppl 2): S161-8  
**Year:** 2012  
**Keywords:** smoke  
**Abstract:** Smoke from a wildfire in northern New Mexico that moved along the border of the Los Alamos National Laboratory (LANL) was monitored for 239Pu in the event that the fire might cross into LANL property containing locations with low, but greater than background, levels of 239Pu and other alpha-emitting radionuclides. Three Environmental Continuous...  
**Contact:** jjwhicker@lanl.gov  
**FRI Access Number:** 95259

**Author(s):** Wiedemeier, Daniel B., Michael D. Hilf, Rienk H. Smittenberg, Michael W. I. Schmidt  
**Title:** Improved assessment of pyrogenic carbon quantity and quality in soils by liquid chromatography  
**Source:** Journal of Chromatography A, 1304; 246-350  
**Year:** 2013  
**Keywords:** soils  
**Abstract:** Fire-derived (pyrogenic) carbon (PyC) is produced by the incomplete combustion of biomass, for example during wildfires. It can persist in the environment for a long time due to its relative resistance against biological and chemical breakdown. Its accurate quantification in soils, sediments and other environmental media is of great interest because the slow turnover of PyC has...  
**Contact:** daniel.wiedemeier@geo.uzh.ch  
**FRI Access Number:** 95333

**Author(s):** Wilson, B., L. E. Valentine, J. Kuehs, M. Swinburn  
**Title:** Impact of fire on biodiversity of the Gnangara Groundwater System  
**Source:** Department of Environment and Conservation of Western Australia, 121 pages  
**Year:** 2010  
**Keywords:** ecology hydrology  
**Abstract:**... On the other hand, species with short-lived seed or serotinous species that only regenerate after fire may decline in long unburnt areas (Bond ... communities have focused on time since fire the effects of multiple fires have been less intensively studied (Bowman et al. ...  
**FRI Access Number:** 96919

**Author(s):** Wilson, B., J. Kuehs, L. E. Valentine  
**Title:** Guidelines for developing ecological burning regimes for the Gnangara Groundwater System  
**Source:** Department of Environment and Conservation of Western Australia, 118 pages  
**Year:** 2010  
**Keywords:** ecology hydrology  
**Abstract:**... The project collected secondary juvenile period (post-fire time to flowering) information for in Banksia woodland after a prescribed fire to assess the juvenile period of flora species for the... cones, of populations of B. attenuata and B. menziesii at sites of different time since fire...
**Title:** Wildfire as a mechanism to reverse ecohydrologic thresholds in juniper-encroached shrublands  
**Source:** American Geophysical Union, Annual Fall Meeting, 2012, San Francisco, CA; 12/2012  
**Year:** 2012  
**Keywords:** ecology  
**Abstract:** Woodland encroachment into Great Basin, USA, sagebrush steppe potentially educes a shift from biotic-controlled resource retention to abiotic-driven losses of critical soil resources. The biotic-to-abiotic shift occurs where encroachment propagates runoff connectivity and amplified cross-scale erosion, that in-turn, promote woodland ecohydrologic resilience. Our research objective...

**Title:** The effect of burning on amphipods (Crustacea: Amphipoda) in a tussock grassland, Otago, New Zealand  
**Source:** M. S. Thesis, University of Otago  
**Year:** 2014  
**Keywords:** grasslands  
**Abstract:** This research aimed to determine the temporal and spatial response patterns in amphipod density following seasonal fires in native grasslands, and explore possible implications for ecosystem functioning. The study was carried out in tussock grassland at 700m a.s.l. at Deep Stream, Otago, in the South Island of New Zealand...

**Title:** The relative importance of hydrophobicity in determining runoff-infiltration processes in burned forest soils  
**Source:** EGU General Assembly 2010, held 2-7 May, 2010 in Vienna, Austria, p.13440  
**Year:** 2010  
**Keywords:** soils repellency  
**Abstract:** Wildfires induce fundamental changes to vegetation and soil structure/texture which consequently have major impacts on infiltration capacity, overland flow generation, runoff and sediment yields. The relative importance, however, of fire-induced soil water repellency (WR) on hydrological and erosional processes is somewhat controversial, partially, as the direct effects of soil WR in-situ field conditions have been difficult to isolate. It is generally accepted that hydrophobicity is caused by the formation of organic substances in forest soils, while burning is considered to enhance this process. Given the complex response of the soil-vegetation system to burning...

**Contact:** leaw@geo.haifa.ac.il  
**FRI Access Number:** 96866
**Current Titles in Wildland Fire, July, 2014**

**Author(s):** Woolford, D. G., C. B. Dean, D. L. Martell, J. Cao, B. M. Wotton  
**Title:** Lightning-caused forest fire risk in Northwestern Ontario, Canada, is increasing and associated with anomalies in fire weather  
**Source:** Environmetrics, available online 2014  
**Year:** 2014  
**Keywords:** lightning cause risk canada  
**Abstract:** Results from studies of climate model scenarios suggest that forest fire ignitions will increase in Canada in the future because of climate change. Yet, there have been few studies that monitor long-term trends in Canadian historical fire records. Although there are seasonal...  
**Contact:** dwoolford@wlu.ca

**Author(s):** Yahya, Khairunnisa, Yang Zhang, Jeffrey M. Vukovich  
**Title:** Real-Time Air Quality Forecasting over the Southeastern United States using WRF/Chem-MADRID: Multiple-Year Assessment and Sensitivity Studies  
**Source:** Atmospheric Environment, Available online 15 April 2014  
**Year:** 2014  
**Keywords:** smoke air quality  
**Abstract:** An air quality forecasting system is a tool for protecting public health by providing an early warning system against harmful air pollutants. In this work, the online-coupled Weather Research and Forecasting Model with Chemistry with the Model of Aerosol Dynamics, Reaction, Ionization and Dissolution (WRF/Chem-MADRID) is used to forecast ozone (O3) and fine particles...  
**Contact:** yang_zhang@ncsu.edu

**Author(s):** Yue, C., P. Ciais, P. Cadule, K. Thonicke, S. Archibald, B. Poulter, W. M. Hao, S. Hantson, F. Mouillot, P. Friedlingstein, F. Maignan and N. Viovy  
**Title:** Modelling fires in the terrestrial carbon balance by incorporating SPITFIRE into the global vegetation model ORCHIDEE Part 1: Simulating historical global burned area and fire regime  
**Source:** Geosci. Model Dev. Discuss., 7: 2377-2427, 2014  
**Year:** 2014  
**Keywords:** modeling carbon soils  
**Abstract:** Fire is an important global ecological process that determines the distribution of biomes, with consequences for carbon, water, and energy budgets. The modelling of fire is critical for understanding its role in both historical and future changes in terrestrial ecosystems and the climate system...  
**Contact:** chao.yue@lsce.ipsl.fr  
**FRI Access Number:** 96730
Author(s): Zaccone, C., G. Rein, V. D’Orazio, R. M. Hadden
Title: Smouldering fire signatures in peat and their implications for palaeoenvironmental reconstructions
Source: geochimica et Cosmochimica Acta, available online, 2014
Year: 2014
Keywords: peat smoldering combustion paleohistory
Abstract: Peatland ecosystems are valued as natural archives of past climatic and vegetation changes and as such their study is essential for palaeoenvironmental reconstructions over millennia. Fires in peatlands are dominated by smouldering combustion which is the self-...
Contact: claudio.zaccone@unifg.it
FRI Access Number: 96813

Author(s): Zhengxi Tan, Shguang Liu, Bruce Wylie, Calli B. Jenkerson, Jennifer Oeding, Jennifer A. Rover, Claudia Jimena Young Perea
Title: MODIS-informed greenness responses to daytime land surface temperature fluctuations and wildfire disturbances in the Alaskan Yukon River basin
Year: 2013
Keywords: remote sensing
Abstract: Pronounced climate warming and increased wildfire disturbances are known to modify forest composition and control the evolution of the boreal ecosystem over the Yukon River Basin (YRB) in interior Alaska. In this study, we evaluate the post-fire
Contact: ztan@usgs.gov
FRI Access Number: 95210

Author(s): Zhengxi Tan, Shguang Liu, Bruce Wylie, Calli B. Jenkerson, Jennifer Oeding, Jennifer A. Rover, Claudia Jimena Young Perea, Mark Parrington, Paul I Palmer, Andrew Rickard, Jennifer Young, Ally Lewis, James Lee, Daven Henze, David Tarasick, Edward Hyer, Robert Yantosca, Kevin Bowman, John Worden, Debora Griffin, Jonathan Franklin, Detlev Helmig
Title: Quantifying the influence of boreal biomass burning emissions on tropospheric oxidant chemistry over the North Atlantic using BORTAS measurements
Year: 2013
Keywords: smoke
Abstract: We use the GEOS-Chem chemistry transport model to quantify the impact of boreal biomass burning on tropospheric oxidant chemistry over the North Atlantic region during summer of 2011. The GEOS-Chem model is used at a spatial resolution of 1/2 degree latitude by 2/3 degree longitude for a domain covering eastern North America...
FRI Access Number: 95180
Preliminary Assessment of Vegetation Fires and their Impact in Nyanga National Park, Zimbabwe

Author(s): Zisadza-Gandiwa Patience, Gandiwa Edson, Matokwe Tichaona, Gwazani Rachel, Mashapa Clayton, Muboko Never, Mudangwe Sybert

Title: Preliminary Assessment of Vegetation Fires and their Impact in Nyanga National Park, Zimbabwe

Source: Greener Journal of Biological Sciences. 02/2014; 4(1):009-017.

Year: 2014

Keywords: ecology, wildlife

Abstract: This study aimed at assessing the patterns of vegetation fires and their impact in Nyanga National Park (NNP), Zimbabwe. Field assessments were conducted in September 2012. Our results showed that fires are common in NNP with the majority of fires being caused by poaching activities. Moreover, anthropogenic activities, particularly agricultural activities, in the boundaries of the park also increased the fire occurrences. However, there were no significant increases in number of fires or spatial extent of burnt area between 2008 and 2012 (P > 0.05). Fires influenced vegetation structure and composition, wildlife communities and negatively affected infrastructure within the park. We recommend for the development of a fire management plan for NNP.

Contact: egandiwa@gmail.com

FRI Access Number: 96914