

International Journal of Wildland Fire

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Contents	Volume 18	Issue 2	2009
Ecological thresholds and the status of fire-sensitive vegetation in western Arnhem Land, northern Australia: implications for management Andrew C. Edwards and Jeremy Russell-Smith <i>International Journal of Wildland Fire</i> 18, 127–146		This paper explores the application of fire regime ecological thresholds to fire management of fire-sensitive vegetation types in monsoonal northern Australia. Based on validated sixteen-year fire history and vegetation structural mapping derived principally from Landsat-scale imagery, current fire regimes are shown to substantially exceed ecologically sustainable conditions for three indicator vegetation types.	
Relative importance of fuel management, ignition management and weather for area burned: evidence from five landscape–fire–succession models Geoffrey J. Cary, Mike D. Flannigan, Robert E. Keane, Ross A. Bradstock, Ian D. Davies, James M. Lenihan, Chao Li, Kimberley A. Logan and Russell A. Parsons <i>International Journal of Wildland Fire</i> 18, 147–156		The effect on area burned of different approaches to managing fuel, different levels of effort in managing fire ignitions, and year-to-year variation in weather were determined using five computer models of fires in landscapes. Variation in weather and ignition management were found to consistently prevail over the effects of fuel management in a range of fire-prone ecosystems.	
Public perspectives of fire, fuels and the Forest Service in the Great Lakes Region: a survey of citizen–agency communication and trust Bruce A. Shindler, Eric Toman and Sarah M. McCaffrey <i>International Journal of Wildland Fire</i> 18, 157–164		This paper describes opinions and perspectives of citizens on fuel reduction practices and related risks on National Forests in the Great Lakes Region of the US (Michigan, Minnesota, Wisconsin). The mail survey data also addressed public confidence in the Forest Service to effectively implement treatments and attitudes about citizen–agency interactions.	
Effectiveness of prescribed fire as a fuel treatment in Californian coniferous forests Nicole M. Vaillant, Jo Ann Fites-Kaufman and Scott L. Stephens <i>International Journal of Wildland Fire</i> 18, 165–175		Pre- and post-prescribed fire conditions were modeled for nine stands on eight National Forests in California to determine the effectiveness of treatments. After prescribed fire, all stands experienced less severe fire behavior. However, based on pre-treatment conditions, targeting stands that are at elevated risk would better use limited fuel treatment resources.	
Predicting mortality of ponderosa pine regeneration after prescribed fire in the Black Hills, South Dakota, USA Mike Battaglia, Frederick W. Smith and Wayne D. Shepperd <i>International Journal of Wildland Fire</i> 18, 176–190		This study investigates factors related to the mortality of ponderosa pine seedlings and saplings on prescribed burns. The analysis indicated that tree size and damage to the crown, roots, and cambium all caused mortality. Differences in damage thresholds between ponderosa pine seedlings and saplings highlight their susceptibility to different damage pathways and give managers several options when designing burn prescriptions.	
Environmental and climatic variables as potential drivers of post-fire cover of cheatgrass (<i>Bromus tectorum</i>) in seeded and unseeded semiarid ecosystems Douglas J. Shinneman and William L. Baker <i>International Journal of Wildland Fire</i> 18, 191–202		This paper examines the potential to predict non-native cheatgrass dominance after wildfire in piñon–juniper and sagebrush ecosystems. Cheatgrass cover was positively correlated with time since fire, pre-fire annual forb cover, and post-fire precipitation; negatively correlated with pre-fire measures of biological soil crust cover, species richness, and precipitation; and not significantly correlated with post-fire seeding.	
The influence of leaf water content and isoprenoids on flammability of some Mediterranean woody species Manuela De Lillis, Pietro Massimiliano Bianco and Francesco Loreto <i>International Journal of Wildland Fire</i> 18, 203–212		The combined influence of leaf water content and isoprenoid content and emission on leaf flammability was assessed in Mediterranean tree species. The two variables influence the temperature of flame appearance in opposite ways. Isoprenoids may decrease the temperature of flame appearance considerably in monoterpene-emitting species.	

Litter burning does not equally affect seedling emergence of native and alien species of the Mediterranean-type Chilean matorral

Susana Gómez-González and Lohengrin A. Cavieres

International Journal of Wildland Fire **18**, 213–221

This paper reports differential seedling emergence from the soil seedbank of alien v. native species in the Chilean matorral after experimental fires. Implications for post-fire alien invasion are discussed in relation to other Mediterranean-type ecosystems.

Soil responses to fire in Mediterranean forest landscapes in relation to the previous stage of land abandonment

Joan Llovet, Manuel Ruiz-Valera, Ramon Josa

and V. Ramon Vallejo

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The abandonment of old agricultural terraces is a widespread phenomenon in the NW Mediterranean basin. We studied the interaction between age of abandonment and soil response to fire. Long-abandoned terraces colonised by pine forest were seen as vulnerable to fire and highly dependent on post-fire rain to recover.



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