

Success Stories

How the SWFSC and JFSP bring professionals together to improve outcomes



**SOUTHWEST
FIRE SCIENCE
CONSORTIUM**



Spreading innovation: How successful management case studies lead to trying 'outside the box' fire management strategies"

THE SOUTHWEST FIRE SCIENCE CONSORTIUM (SWFSC) IS SUCCESSFULLY BRINGING TOGETHER FIRE MANAGERS, PRACTITIONERS, AND SCIENTISTS TO ASSURE the best science is used to address the most pressing fire management challenges. One management challenge the SWFSC is addressing and having lasting impacts on is innovative fire management practices.

- » Use of prescribed fire and carefully managed wildfire is critical for maintaining resilient forests in the Southwest, but use of these tools come with significant challenges.
- » The SWFSC is producing a series of case studies, documenting first-hand manager accounts of successful applications of science-based fire management.
- » Managers throughout the Southwest are using these case studies to learn about creative and innovative approaches to fire management and then applying those approaches in their own areas.

The goal of the SWFSC is to accelerate the awareness, understanding, adoption, and implementation of readily available wildland fire science throughout the southwestern U.S. by providing a forum for managers, scientists, policy makers, and the public to interact and share science. The SWFSC is part of the Joint Fire Science Program Fire Science Exchange Network, a national collaboration of 15 regional fire science exchanges.

“As a program, we have often watched the videos and read the working papers and have said ‘why can’t we do that?’”

— Chris Marks, *Deputy Fire Management Officer, Grand Canyon National Park*



Fifteen regional Fire Science Exchanges are funded by the Joint Fire Science Program.



The Slopes Burn at Grand Canyon National Park, November 2017.

Read the story...

SWFSC Case Studies

- » A game changer: Prescribed fire and Mexican spotted owls
- » Fire & Archaeology: Working together to protect cultural resources during wildfire & prescribed fire
- » Keeping fire on the ground: resource specialists perspectives on the Kaibab National Forest
- » The 2014 San Juan Fire: Fuel treatments and fire management
- » San Carlos Apache – building a culture of fire
- » Every fire is an opportunity to treat a landscape
- » The fire laboratory: Forest restoration on the Gila
- » Past meets present: Using old burns in fire management
- » Mastication treatments in southwestern forests
- » Managing wildfire: Blazing the trail in the Southwest

For southwestern forests, the scientific consensus states that prescribed fire and carefully managed wildfire are effective tools for maintaining healthy forests and reducing the threat of catastrophic wildfire. These tools however, are not without risk and managers face many challenges in applying them. The leaders of the Southwest Fire Science Consortium (SWFSC) therefore know that simply delivering fire science to managers is not sufficient. To get fire science applied on the ground, you have to provide concrete examples of managers using innovation to overcome challenges in implementing science-based fire management.

This is the idea behind a series of case studies produced by the SWFSC. Through videos, working papers, and fact sheets, the SWFSC has documented first-hand manager accounts of the successes they have had in implementing science-based management and the factors that have led to success. For example, in ‘Keeping Fire on the Ground’ managers in the Kaibab National Forest relay how communication and collaboration among resource specialists and fire managers has helped to build acceptance of prescribed fire as a tool to protect multiple valued resources. In ‘The Fire Laboratory’ managers in the Gila National Forest describe how they have successfully managed wildfire to benefit valued resources for decades. In ‘Building a Culture of Fire’ managers from the San Carlos Apache Tribe show how they use previous burned areas to manage subsequent wildfires to meet resource objectives.

Why does this matter? Managers often experiment with new and creative approaches to fire management. When successful, these approaches are likely to be adopted within a management unit. There are often few opportunities however, to share those successes with managers throughout the region. The SWFSC case studies are providing that opportunity. We have heard from managers throughout the Southwest that they frequently meet with others in their management unit to watch SWFSC videos and discuss how they might apply the lessons in their own management. Because of these stories, managers are changing the way they manage fire around sensitive archeological sites, thinking more carefully about how to use topography in planning prescribed fire, and using fire to protect overstory trees on the edge of high severity patches. As managers adopt these innovative techniques, the result is that science-based fire management strategies are spreading like wildfire. 🌱