

Wildland Fire Science Partnership (WFSP)

The University of Idaho is a partner in fire science and research programs that benefit the people of the state, region, and nation. Our research is timely and relevant in this state, where in 2012, Idaho led the nation with 1.7 million burned acres. In 2013, only Alaska had more burned acres than Idaho.

The Wildland Fire Science Partnership is a collaborative effort among the University of Idaho, the University of Montana, and the U.S. Forest Service Rocky Mountain Research Station. By joining efforts, the research into fire restoration and landscape change is strengthened. Wildfire matters to people and land. In 2012, 80 percent of the 9.3 million acres burned by wildfire nationwide were in 11 Western states.



Partners work collaboratively to support effective fire management that balances protecting people and property with limiting expenditures and fostering resilience to future fires. Together they are addressing smoke management and sharing the information with those working on the ground and those impacted by it. Partners provide larger data sets and better technology, resulting in timely, relevant fire science for practitioners as well as students.

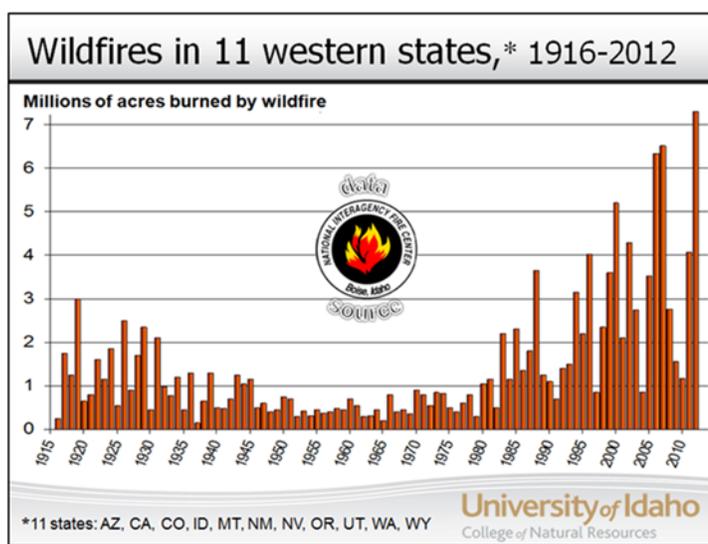
Idaho Fire Institute of Research and Education (IFIRE) has the only university wildfire combustion laboratory in the United States. The lab integrates research and education management.

The University of Idaho's Fire Ecology and Management program produces fire managers with experience and credibility. Students get hands-on experience not only in the lab but on the ground, by participating in prescribed fire burns on the UI's 10,500-acre experimental forest, by helping neighbors with fire and fuels projects, and in field trips to forests and rangelands. Many students gain valuable experience fighting fire for state and federal agencies and private contractors. Others learn by doing research.

Accomplishments

In FY 2014, the Fire Ecology and Management program was one of the first to receive national certification by the Association for Fire Ecology. While the program has thrived for more than 35 years, the national certification is new, and UI was there to lead the way.

The Wildland Fire Science Partnership uses its combined efforts and resources to educate not only students in fire management, but also residents who have been impacted or are at high risk of being



impacted by wildfire. Research findings were shared through online courses and workshops to provide stakeholders and managers with up-to-date and relevant information.



Research

The Wildland Fire Science Partnership is actively investigating the causes and consequences of burn severity across forests and rangelands, including mapping potential high-severity fires for the Western U.S. They guide people in assessing and managing the ecological effects of fires to encourage desirable fire effects and limit extreme fire effects. Investments in geospatial technology and data assembly are leveraged to support effective fire science and management based on understanding landscape and habitat dynamics in changing fire regimes. Managers apply our research to foster resilience through restoration and vegetation management.

Through the Idaho Fire Institute of Research and Education, University of Idaho faculty researchers are studying smoke and its impact on human health. In 2012, the Idaho Department of Environmental Quality reported 26 hazardous smoke events. People are negatively impacted by the carbon monoxide, formaldehyde, ammonia, and particulate matter in smoke. Studying the use of different fire management strategies to reduce smoke and the accompanying toxins is a benefit to our citizens. Researchers perform lab and field experiments to see how masticated fuels burn, with implications for fuel treatments around homes, for carbon, and for emissions.

Science information is shared with partners in online courses for fire professionals, in field trips, in workshops, in short timely syntheses of science to address current fire science issues, and working with leaders.

Addressing large, extreme fires requires an interdisciplinary approach that brings social science and policy to bear along with fire behavior and ecology. Perspectives are integrated to project the implications of recent large fires for people and land into the changing future conditions. This allows us to learn from past change to project future landscape and habitat dynamics.

Consequences of Reduced Funding

Today's fire managers are faced with balancing the potential benefits of fire with the potential impacts to our land and our citizens. Through cutting-edge research and technology transfer, our efforts lead to better discussion and understanding of effective fire and fuels management. Collaborative efforts such as the Wildland Fire Science Partners have a larger return on investment because of the amount and quality of data accumulated and shared. Reduced funding would mean less research, less science, fewer answers, and less collaboration. Each of these, individually, has a negative effect on the future of wildfire management, but together the result could be devastating to the people and property in the face of large fires in the future.

Request: Continue the Wildland Fire Science Partnership at \$2.6 million.

Account: Interior Appropriations, Forest Service, Wildland Fire Science Partnership

For more information, please contact:

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