

Celebrating 10 Years of Wildland Fire Science Delivery through the Fire Science Exchange Network

In 2010, the Joint Fire Science Program (JFSP) established a network of regional fire science exchanges across the United States to facilitate information exchange among fire researchers and fire, fuel, natural resource, and land managers. This year, the JFSP celebrates 10 years of national collaboration through the exchanges. These 15 members of the Fire Science Exchange Network deliver the most relevant wildland fire science information to federal, state, local, tribal, and private stakeholders.



Creating Pathways for Active Knowledge Exchange

The Fire Science Exchange Network fosters dialogue between scientists and managers to help frame fire management questions and research needs.

Key objectives of the Fire Science Exchange Network:





Active participants within the 15 exchanges include: University faculty, Federal Nongovernmental States researchers, and agencies organizations ; | ||| | ; students Counties/ Tribal Private Consultants boroughs/ landowners nations parishes Cities Regional and local Private authorities

communities

associations



Exchange Highlights



Due to the consortium's sustained efforts with universities and agencies, such as NASA and the U.S. Forest Service, Alaska fire managers routinely access and use near-real time remote sensing imagery tools for decisionmaking and fire detection, monitoring, and mapping.



Through educational trail signs, a podcast, and a social media campaign using #goodfire, the consortium informs the public about the science behind the use of controlled burns in Appalachian forests, thus increasing trust among communities and fire professionals.



The consortium improved the understanding of fine-fuel dynamics in desert ecosystems by developing a tool and a photographic guide that allow land managers to rapidly estimate fine-fuel biomass in the Mojave Desert.



Public land managers throughout the region use a series of fuels and post-fire restoration field guides created by the exchange to assess site conditions, evaluate treatment options, and apply those treatments promising the best management outcomes.



The exchange worked with educators, original FireWorks developers, and tribes to develop a FireWorks curriculum about the tallgrass prairie ecosystem for high school students and youth activity books about traditional ecological knowledge and fire ecology and history.



The consortium has supported the use of science in the management of firedependent ecosystems by developing a searchable, online database of more than 1,500 regionally-relevant citations while also enhancing opportunities for collaboration through a competitive program that supports interns working with teams of managers and scientists.



The exchange spans boundaries to embrace the organizational diversity in the Northeast and Mid-Atlantic fire community while bridging science and training needs, which leads to science-based management implementation, strengthened cross-organizational bonds, and amplified capacity in the region.



The network strives to understand and address the priorities of tribal fire and fuels managers in the region through newsletters, workshops, conversations, publications, webinars, and websites focused on traditional knowledge and a variety of fire and fuels topics.



In collaboration with Oregon State University, the consortium hosted a technical field tour of the 36-Pit Fire near Estacada, Oregon, highlighting observations, experiences, communication efforts, and lessons learned to 45 attendees.



In an effort to address a fire science topic of high interest in the Eastern U.S. prescribed fire effects on oak timber quality— the consortium hosted workshops and field trips, provided numerous in-person presentations, and promoted this topic for funding support, leading to more available science and increased understanding and communication among fire management decisionmakers across the Eastern U.S.



The exchange plays a critical role in conveying the Pacific's foundational fire science information, which has been used in multiple Senate Energy and Natural Resources Committee hearings, cited by Hawaii's governor and chair of the Department of Land and Natural Resources, and used by state and federal agencies to successfully petition for additional fire management and suppression resources.



The exchange has led a multipronged approach to share JFSP-supported duff fire science research with fire managers across the Southeast through workshops that have reached fire and land managers responsible for managing more than 5.5 million acres in the Southeast. The exchange has also produced videos, fact sheets, conference presentations, and a magazine article related to duff fire science.



The network provided planning and coordination support for the creation, bylaws, and programming of prescribed fire councils in the majority of the states in the region, including Colorado, Utah, and Wyoming, and is also helping in the formation of other prescribed fire councils.



The consortium provides a forum for communities throughout the Western U.S. to learn from previous successes and mistakes, such as protecting watersheds from the lasting effects of high-severity wildfire and associated cost savings; and building resilience through increased use and acceptance of prescribed fire and wildfire for resource benefit. Learning through success and error is a cornerstone of progression in fire and land management.



The consortium focused on the science of reintroducing fire into oak savannas and woodlands by bringing forestry and wildlife professionals together at a workshop, partnering with the Wisconsin Department of Natural Resources on a scouting trip for foresters and ecologists, and focusing on the best available science.

FIRESCIENCE.GOV Research Supporting Sound Decisions