



Making of the 50th Anniversary Quilt

The Fire Lab Quilters have designed and made quilts since 2007 and have donated many quilts to the Missoula community. All parts of the 50th Anniversary Quilt display were designed and completed by Fire Lab staff and associates. Contributors to the project include Audrey Peterson, Bobbie Bartlette, Carolyn Bunger, Danette Paige, Diane Smith, Diane Trethewey, Elizabeth Reinhardt, Emily Lincoln, Faith Ann Heinsch, Jane Kapler Smith, Jo Crawford, Karen Iverson, Kelsi Plante, Laurie Kurth, Matt Jolly, Michelle Baker, Pam Sikkink, Pat Andrews, Penny Bertram, and Randy Pryhorocki.

Visit www.firelab.org for more information about the Fire Lab's history and current research.



ANNIVERSARY QUILT

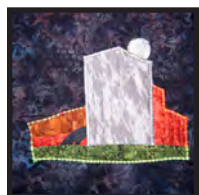


Predicting fire behavior and fire effects – whether to manage ecosystems more effectively or to protect human lives and property – presents a constant challenge to those who manage the nation's forests and other wildlands. For the last 50 years, Fire Lab research teams have investigated the science of wildland fire to help managers meet that challenge in the field.

Research continues at the Missoula Fire Sciences Laboratory. From understanding the interactions of fire and climate to protecting the forest-urban interface, for the next 50 years Fire Lab research will be much like this quilt: a team effort made possible by the dedicated contributions of talented researchers and staff, with the results even greater than the sum of its parts.



The Forest Service dedicated the Missoula Fire Lab on September 12, 1960, establishing “a powerful means for making progress in the big job of forest protection and management.” This quilt, created by Fire Lab staff and associates, celebrates the Lab’s first 50 years.



The Fire Lab houses a combustion chamber and two wind tunnels for studying fire under controlled conditions. The large white globe atop the building receives satellite data used to predict air quality downwind from large fires across the continent.



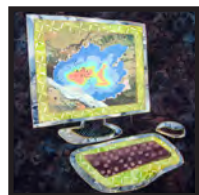
Fire Lab scientists work to understand all three components of the Fire Environment Triangle – fuel, weather, and topography – so they can better predict the behavior and effects of wildland fires.



The current National Fire Danger Rating System, developed by the Fire Lab, uses weather stations and communications technology to rate fire danger nationwide. The system helps managers make decisions and informs the public about fire danger.



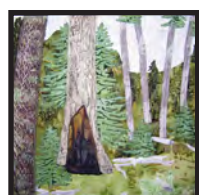
Richard Rothermel’s 1972 fire spread model forms the basis for predicting fire behavior and rating fire danger throughout the United States. This equation and illustration are from his publication, “A Mathematical Model for Predicting Fire Spread in Wildland Fuels.”



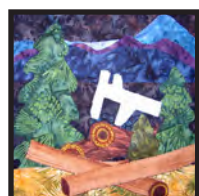
Fire scientists take advantage of new technologies as they emerge. Recently developed computer software, for example, allows wildland managers to explore hypothetical decisions and visualize their outcomes on the landscape.



To understand how different fuels burn, Fire Lab researchers measure the chemical and physical properties of fuel particles. Scientists also investigate the components of smoke to help predict pollution from wildfires.



Fire Lab researchers investigate the effects of fire on trees, shrubs, grasses, and other organisms. Fire scars like this one provide insights into the long history of fire as a force that helps to shape wildland ecosystems.



The “Go/No-Go” gauge developed at the Fire Lab measures the size of fuel particles. Knowledge of the amount and spatial arrangement of fuels is essential for predicting fire behavior and effects.



Fire Lab researchers use satellite data and field observations to predict the concentration and movement of smoke from wildland fires. This information is then used to estimate smoke effects on health, air quality, and global climate.



The 50th Anniversary quilt uses an ancient art form to capture a modern story about science. The “Oregon coast” blocks in the quilt’s corners and the quilting itself represent this traditional American art. The hanger, constructed of wood and metal, also represents traditional American crafts.