



The Science of Mulch

The Marin Wildfire Prevention Authority (MWPA) is funding a study to determine the relative combustibility of various popular mulch products. Choosing the right mulch in wildfire prone areas is important. Some mulches can ignite and spread fire quickly. Others are less easily ignited and take longer to burn. Questions about the safety of various types of mulch are some of the most common questions asked by homeowners. Until now, there has been a lack of scientific data to compare various mulch products.

The mulch study took place at the Marin County Fire Department Admin Headquarters at the San Geronimo Golf Course from October 10-12th. Ten different mulch products were separated into piles and allowed to dry and weather to simulate the condition of mulch found in Marin yards and landscapes. Each mulch was placed into three circular piles approximately 8 feet in diameter and 3 inches deep. After the material had weathered for four months, the material was ignited. Instruments were placed to measure flame length, rate of flame spread, and radiant heat. The experiment was filmed so stay tuned for videos!

For observers who were on site to witness the burn, it was clear that some mulch products ignited fairly easily and quickly, generating more heat and flame than other products. Decomposed mulch products seemed to perform well, meaning they slowly smoldered rather than igniting in flame. Decomposed mulch looks like pieces of bark mixed with dirt or compost. These observations are strictly anecdotal. We will need to wait until the measurements from the instruments are analyzed before presenting a finding. The next phase of the project involves more testing in a lab.

Fire Safe Marin will share the results when they are available.



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