

Principal short-term findings of the national Fire and Fire Surrogate study by theme and major ecosystem component

All of the numbers in this table represent publications.

To find the citation for any number, refer to the Look-up Table for Publication Numbers and Citations.

Theme	Finding	Relevant treatments						Bark	Vertebrate	Invertebrates
			Trees	Understory	Fuels	Soils	beetles	biodiversity	fungal biodiversity	
Fire vs. surrogate	For the great majority of variables, mechanical treatments did not serve as surrogates for fire, with mechanical treatments resulting in effects similar to untreated controls for most ecological variables, while the burn and mechanical + burn treatments resulted in similar effects	Fire vs. no fire	2, 3, 21, 34, 52-54, 79-82, 86, 88, 109, 137, 171, 206	4, 23, 24, 35-39, 55, 90-93, 109, 110, 172	26, 40, 56, 58, 94-97, 111, 112, 146, 147, 162, 174	10, 41-43, 50, 59, 61, 99, 101-103, 115-118, 132, 149, 163, 164, 176-178, 180	46, 51, 130, 131, 206	11, 12, 27, 44, 45, 63, 78, 104, 119, 122, 123, 125-127, 142, 152, 155-157, 165, 181, 182, 184	19, 28, 64, 65, 106, 128, 129, 158, 159, 166, 167, 206	
Effect size	Ecological effects of fire and fire surrogate treatments were generally subtle and transient, suggesting that these kinds of treatments resemble the magnitude of historical disturbances in seasonally dry forest ecosystems	All	1-3, 21, 22, 34, 48, 52-54, 79, 81, 82, 84-86, 109, 135-137, 171	4, 5, 24, 36-39, 55, 67, 89-93, 109, 110, 144, 172	6-8, 25, 26, 49, 56-58, 68, 70, 95-98, 111-114, 148, 162, 174,	10, 41, 43, 50, 59-61, 71, 99-103, 115, 117, 118, 132, 163, 164, 176-180	46, 51, 74, 130, 131	12, 44, 63, 72, 75-78, 121, 139-143, 150-152, 154-157, 165, 181, 183	19, 28, 64, 65, 73, 105, 106, 128, 129, 158-160, 166, 167	
Effect duration	In most cases ecological variables tended to return to pretreatment conditions after several years, including key components of the fuel bed.	All	53, 79-81, 85, 135, 161	36, 37, 39, 67, 89, 90, 110, 144, 172	26, 28, 147, 162	41, 61, 101, 115, 118, 149, 164, 175, 179, 180		75-77, 139, 151, 182, 183	19, 64, 107, 107, 128, 167	
East vs. West	Eastern sites differed from western sites in several important ways, suggesting the need to consider issues such as carbon sequestration and the frequency of repeated burns and mechanical entries.	All	22		162	175, 176				
Species adaptation	Species generally responded to treatments in a manner consistent with their life history characteristics; most native species demonstrated positive responses consistent with adaptation to frequent, low intensity fire.	All		24			130, 131	11, 12, 27, 44, 63, 72, 119, 123, 126, 133, 138, 140, 151, 153, 181, 184	13-18, 64, 65, 73, 134	