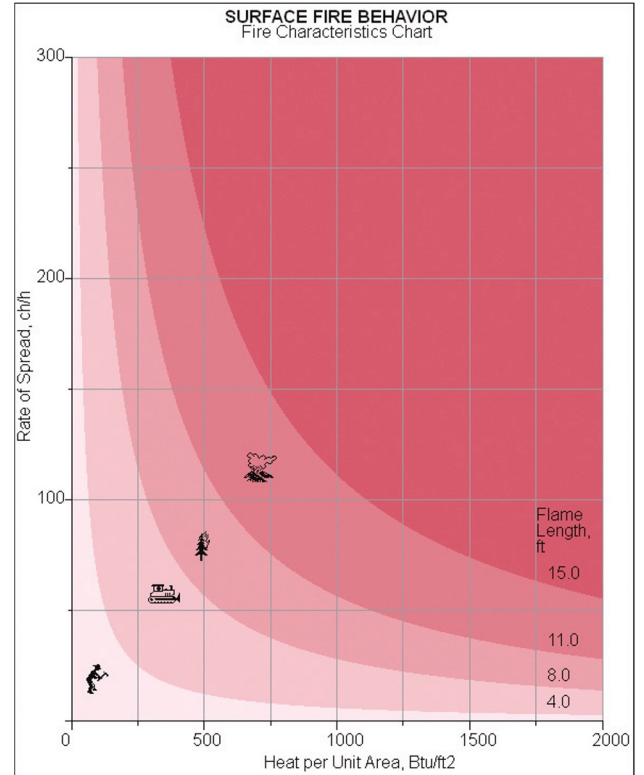
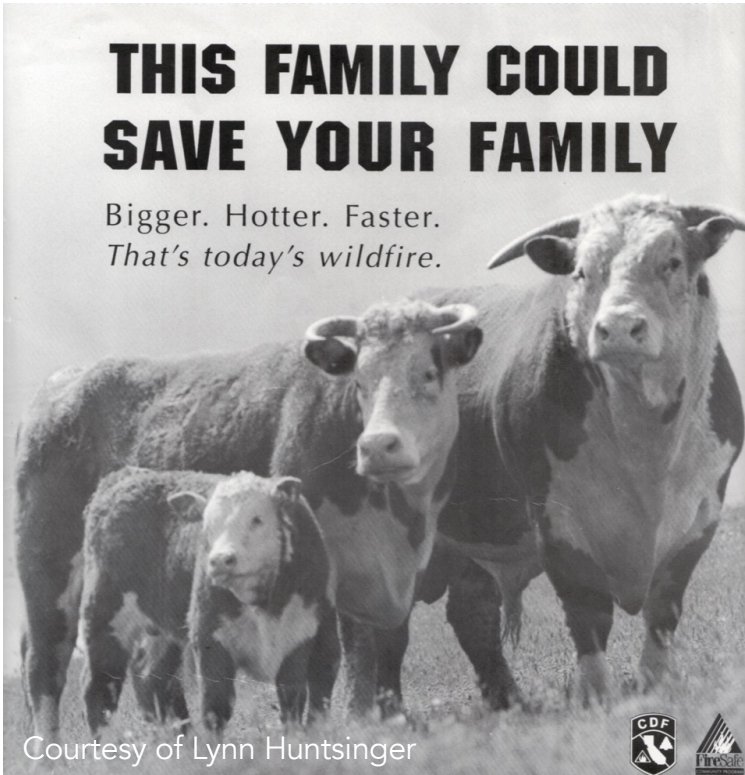


Science of livestock fuels management and fire danger reduction "Targeted Grazing for Fuel Reduction" RMAC/Cal-Pac; May 8, 2023

Matthew Shapero, UC Cooperative Extension, Livestock & Range Advisor
 Ventura and Santa Barbara Counties; mwkshapero@ucanr.edu



"Livestock can help stop fires before they start. They can save your life and property by establishing defensible space..."

-CDF Director Richard Wilson

Rustici Endowment: "Quantitative assessment of range use effects on fire behavior"
 Project Partners: Roxanne Foss, Shane Dewees, Lenya Quinn-Davidson, Jeff Stackhouse, Luke Macaulay

Stratification Variables	Weather Variables	Dependent Variables
<ul style="list-style-type: none"> • Treatment (Biomass) • Slope • Vegetation Zone 	<ul style="list-style-type: none"> • Temperature • Relative humidity • Wind speed 	<ul style="list-style-type: none"> • Flame height • Passing 10m • Cover of burned, ash, etc. • Rate of spread • Surface temperature



Biomass Range (lbs/acre)	Grazing Level	Potential Fire Behavior
>3,500	Ungrazed	Likely flame heights above 4 ft and all biomass is burned
3,500 to 2,500	Ungrazed or very light	Possible flames above 4 ft and majority burned
2,500 to 1,250	Light to moderate	Flames likely below 4 ft and fire will not be stopped
1,250 to 400	Moderate to heavy	Flames below 4 ft and fire may be stopped
<400	Very heavy	Flames below 4 ft and highly likely fire stopped