

Integrative Approaches to Vegetation Management: Grazing for Fuel Reduction

The California Range Management Advisory Committee (RMAC)
& the California Pacific Society for Range Management (Cal Pac SRM)

California is struggling with hazardous vegetative fuel

A fuel treatment South of Paradise, CA



A community affected in the 2018 Paradise Fire

RPFs, CRMs, and Targeted Graziers are working *independently* to address fuels



Continuity on the Landscape

- ▶ More effective fuel treatment when we collaborate across vegetation types
- ▶ Treatments can overlap among appropriate vegetation types, resulting in a more resilient landscape
- ▶ Finding solutions for treating complex systems will require us all - and is the way forward

How Can Livestock Be Managed?

- ▶ Targeted Grazing

- ▶ Grazing to reduce specific vegetation for fuel reduction, invasive species control, ecosystem restoration



- ▶ Annual Seasonal Ranching

- ▶ Grazing annually to produce an animal product
 - ▶ Maintains resilient, diverse, healthy rangelands



Methods of Preserving Natural Resources During Fuel Treatment

- ▶ Identification of Areas of Concern (e.g.)
 - ▶ Sensitive Botanical Resources
 - ▶ Watercourses
 - ▶ Wetlands
 - ▶ Protected Animal Species
- ▶ Grazing Infrastructure Required to Target Certain Areas
 - ▶ Fencing
 - ▶ Water
 - ▶ Mineral Supplements
- ▶ Stocking Rates and Livestock Movement

Where Are Livestock Effective? (1)



Rangelands

WUI Areas



Where Are Livestock Effective? (2)



Utilities/County/City Property

Forests...?



Why is Grazing in the Forest Valuable? (1)

- ▶ Key fuel types in forests:
 - ▶ Canopy
 - ▶ Ladder
 - ▶ Surface
- ▶ Surface fuels are often where the fire starts
 - ▶ Grazing and Browsing animals can help reduce surface fuels to a level that facilitates the kind of frequent, low-severity fires that historically dominated much of California
- ▶ Ladder fuels carry the fire upward
 - ▶ Browsing animals can also reduce vertical continuity of fuels or help create an environment where additional fuel treatments can occur



Why is Grazing in the Forest Valuable? (2)

- ▶ One of the greatest challenges with any fuel treatment - **MAINTENANCE**
 - ▶ Grazing and Browsing animals **maintain** vegetative fuels without the air quality consequences of repeated prescribed fire and help keep the risk of catastrophic wildfire down
- ▶ Reduce competitive vegetation on working forests
 - ▶ Maximize tree growth in younger stages by removing brush and grasses that can take resources from the target crop
- ▶ Sierra Pacific Industries incorporates grazing on fuel breaks and during reforestation in several areas across their ownership and have reduced their use of pesticides significantly

How Can We Work Together? (1)

- ▶ Collaborate with a CRM
 - ▶ A “Certified Rangeland Manager (CRM)” is a person who provides services pursuant to 14 California Code of Regulations (CCR) 1602, at the request of the landowner or hiring agent, relating to the application of scientific principles to the art and science of managing rangelands and range. A Certified Rangeland Manager shall perform professional services only in those subjects in which he or she is competent by training and experience (14 CCR § 1651).
 - ▶ PFEC Policy 12 – Guidance on the Certified Rangeland Manager Program
 - ▶ “The CRM license is required for professional practice of rangeland management on non-federal forested landscapes as a specialty authorized under a modification of the Professional Foresters Licensing Act (AB1903) that requires the Registered Professional Forester license for the practice of forestry.”
 - ▶ This includes, but is not limited to, management planning, implementing improvements on watersheds, monitoring efforts, prescriptive grazing.

How Can We Work Together? (2)

- ▶ Find a Contract Grazing Service
 - ▶ Stephanie Larson's outreach materials
- ▶ NRCS Opportunities
- ▶ Inclusion of Grazing in Timber Harvesting Projects Under CAL FIRE Grants & CFIP
- ▶ Examples of RPFs and CRMs working together

Questions?

