Targeted Grazing Survey Report

Roger Ingram, Chair CWGA Wildfire and Grazing Ad Hoc Committee

Committee Members:

Dr. Rosie Busch, Marie Hoff, Ryan Indart, Beth Reynolds, Andree Soares, Cole Bush, and Rob Rutherford
Survey Contacts – 32 Respondents
Conducted December 2020 – February 2021 via Phone Interview

<table>
<thead>
<tr>
<th>Surveyed List Contacts</th>
<th>CWGA Targeted Grazing Directory</th>
<th>UCCE Placer / Nevada</th>
<th>UCCE MatchGraze</th>
<th>Not on Other Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>List Contact Out of Business</td>
<td>15</td>
<td>7</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>List Contact Not Doing TG</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
Survey Paid Acreage Grazed

Targeted grazing services are being or have been provided in 46 out 58 counties by 32 surveyed providers.

<table>
<thead>
<tr>
<th>Targeted Grazing Survey</th>
<th>Total</th>
<th>&lt;500 Head</th>
<th>&gt;500-2,499 head</th>
<th>&gt;2,500 head</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey Respondents</td>
<td>32</td>
<td>12</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Total Paid Acres</td>
<td>75,714</td>
<td>1,667</td>
<td>5,467</td>
<td>68,580</td>
</tr>
<tr>
<td>Average Paid Acres</td>
<td>2,366.1</td>
<td>138.9</td>
<td>607.4</td>
<td>6,235</td>
</tr>
<tr>
<td>% of Total Paid Acres</td>
<td>100</td>
<td>2.2%</td>
<td>7.2%</td>
<td>90.6%</td>
</tr>
<tr>
<td>Service</td>
<td>Total</td>
<td>Total %</td>
<td>&lt;500 head</td>
<td>&lt;500 head</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------</td>
<td>---------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Survey Acreage by Service Results</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Targeted Grazing Service</strong></td>
<td>Acres</td>
<td>% Total Acres</td>
<td>Acres</td>
<td>% Total Acres</td>
</tr>
<tr>
<td><strong>Fuel Load Reduction</strong></td>
<td>55,794</td>
<td>73.7</td>
<td>1,221</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Vineyard/Crop</strong></td>
<td>15,898</td>
<td>21</td>
<td>216</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Conservation</strong></td>
<td>2092</td>
<td>2.8</td>
<td>20</td>
<td>.03</td>
</tr>
<tr>
<td><strong>Weeds</strong></td>
<td>1,780</td>
<td>2.4</td>
<td>210</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>150</td>
<td>0.2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Survey Demographic Results

- Species managed by 32 surveyed providers were:
  - Sheep only - 12 providers
  - Goats only - 4 providers
  - Sheep and Goats - 16 providers
- Average number of contracted months was 6.5 with a range of 5.7 to 6.4.
- Targeted grazing was the main source of income of 15 surveyed providers (46.7%).
Top 5 Entities Contracting for Paid Grazing Services

- Government - 29 providers
- Private landowners – 20 providers
- Homeowners’ Associations – 16 providers
- Parks - 14 providers
- Vineyard/Crop - 13 providers
- Larger operations (>1,000 head) provided targeted grazing services for solar farms - 8 providers
Challenges for Surveyed Targeted Grazing Providers

- Business related
- Public education & outreach
- Animal welfare
- Animal production, husbandry, and training
- Operations
- Infrastructure
Labor

Staffing

Recruit

Train

Retain

Cost

Scale

Since 2012

Wildfire

Drought Continues

168 hour week

H2A & AB1066

14 out of 20 largest fires occurred

Increase Bid

Absorb Cost

>50% cost increase

Targeted Grazing Works

Valley Fire

Cobblestone HOA Sonoma County

2019

Saved by graze fire break

Grazing saved 1100 homes

Grazed fire break saved 1058 homes

Ronald Reagan Library

Since 2012 14 out of 20 largest fires occurred.
Contracts

Pricing

Profitable

Underbid

Competitive

Know all your costs

Mow

Treatment Options

Herbicide

Mechanical

Request for Proposals

Aware of Availability

Individual

Collaboration

Networking

Completing

Labor

Liability Insurance

Required for bids

Risk Management

Separate from Ranch Liability Policy

Increased Cost

Completing

Collaboration

Networking

Labor

Liability Insurance

Required for bids

Risk Management

Separate from Ranch Liability Policy

Increased Cost
Grazing Education

Targeted Grazing Impacts

Multi-year Commitment

Project Logistics

Not free grazing

Cost

Ecology

Animals

It does not work

Grazing Education

Move to different grazing area

Habitat

Who makes final decision?

Bureaucracy

People & Paperwork

What?

Bureaucracy & Government Agencies

Project Manager

Biologist

Timeliness

Who?

Policies

Limits animal numbers

Graze within city limits

Circus Permit

Livestock Water

Loading and Unloading

Electric Fence

Evacuation

Project Manager

Biology

Loading and Unloading

Cost

Multi-year Commitment

Graze within city limits

Bureaucracy & Government Agencies

People & Paperwork

Who?

Policies

Limits animal numbers

Graze within city limits

Circus Permit

Who makes final decision?
Small Targeted Grazing Businesses
Larger Grazing Contracts
Increase Scale
Path to Profitability
Full Time Work

Lack of Experience
Collaboration
Equipment
Animals
Access to Capital to Build Infrastructure

Challenges
Risk Management
Cash Flow
Loans

Scale of Operation
Animal Production

- Husbandry
- Health
- Nutrition
- Grazing
- Stockmanship
- Labor Training

Production

- Wether Mob
- Smaller lambs and kids
- Put on and take off project
- Thin breeding animals
- Supplement or Substitution Feeding

Notes:
- Smaller lambs and kids
- Thin breeding animals
- Put on and take off project
Implications

Since 2012, 14 out of 20 largest fires occurred due to Drought Continues. Wildfires will continue to grow in Implications, Demand will Grow and Expansion.

New Businesses
Existing Businesses

2019 Cal Vegetation Treatment Program EIR

Streamline CEQA

Fuel Load Reduction 25 million acres
250,000 acres per year

Prescribed Herbivory 25,000 ac
Herbicide 25,000 ac
Mechanical 50,000 ac
Manual 25,000 ac

Fuel Load Reduction 25 million acres
250,000 acres per year

Prescribed Herbivory 25,000 ac
Herbicide 25,000 ac
Mechanical 50,000 ac
Manual 25,000 ac
## New Businesses Needed and/or Expansion of Existing Ones

<table>
<thead>
<tr>
<th>Item</th>
<th>New Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of acres annually grazed according to CalVTP</td>
<td>25,000</td>
</tr>
<tr>
<td>Number of acres 500 head can graze in six month period</td>
<td>500</td>
</tr>
<tr>
<td>Number of new businesses needed (25,000 acres/500 acres per business)</td>
<td>50</td>
</tr>
<tr>
<td>Number of sheep/goats new business needs to purchase to graze 500 acres</td>
<td>500</td>
</tr>
<tr>
<td>Animal cost/head</td>
<td>200</td>
</tr>
<tr>
<td>Animal cost/business</td>
<td>100,000</td>
</tr>
</tbody>
</table>
## Needed Infrastructure

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit Cost</th>
<th># Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck</td>
<td>50,000</td>
<td>1</td>
<td>50,000</td>
</tr>
<tr>
<td>Livestock Trailer</td>
<td>22,500</td>
<td>1</td>
<td>22,500</td>
</tr>
<tr>
<td>Sheepherder Trailer</td>
<td>10,000</td>
<td>1</td>
<td>10,000</td>
</tr>
<tr>
<td>Water Trailer, pump, 1000 gallon tank</td>
<td>12,000</td>
<td>1</td>
<td>12,000</td>
</tr>
<tr>
<td>Utility Trailer</td>
<td>5,000</td>
<td>1</td>
<td>5,000</td>
</tr>
<tr>
<td>ATV</td>
<td>10,000</td>
<td>1</td>
<td>10,000</td>
</tr>
<tr>
<td>Electric netting</td>
<td>175</td>
<td>30</td>
<td>5,250</td>
</tr>
<tr>
<td>Energizers</td>
<td>600</td>
<td>2</td>
<td>1,200</td>
</tr>
<tr>
<td>Solar Panels</td>
<td>600</td>
<td>2</td>
<td>1,200</td>
</tr>
<tr>
<td>Deep cycle batteries</td>
<td>110</td>
<td>4</td>
<td>440</td>
</tr>
<tr>
<td>Voltmeter, ground rods</td>
<td>100</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>117,690</strong></td>
</tr>
</tbody>
</table>
90.6% of survey paid acres were grazed by large companies >2,500 head.

50% Labor Cost Increase

Lack of US Herders

Liability Insurance Availability & Cost

Project Interaction

Benefit Of Targeted Grazing

Logistics

Education

Public

Agencies

New Businesses

Access to Capital $250,000

Experience

Labor

Equipment

Animals

Bureaucracy

People

Who is Decision Maker?

Ability to Implement Project

Benefit Of Targeted Grazing

Logistics

Access to Capital $250,000

Experience

Labor

Equipment

Animals

Bureaucracy

People

Who is Decision Maker?

Ability to Implement Project
RMAC

Advisory on rangelands of CA
Board of Forestry
CDFA
Cal EPA

Vision
Resilient Rangeland Landscape
Diverse Ecosystem Services to support CA ecological & human health

Mission
Consider rangeland resource issues
Provide Recommendations
Facilitate Strong Relationships
Develop Solutions
Facilitate Strong Relationships
Provide Recommendations
Develop Solutions
Understand Targeted Grazing Service Reduces Fire Risk

Implement Targeted Grazing Opportunities

Understand Targeted Grazing Benefits

Identify & Facilitate Project Logistics

Identify & Remedy Policy Barriers

Understand Targeted Grazing Service Reduces Fire Risk

Infrastructure Grant Program

Public Agency Targeted Grazing Grant Program

Landowner Targeted Service Grazing Cost Share Program

Agency Education

Simplify RFP Process

Identify Decision Makers

Bureaucracy

Targeted Grazing Funding

RMAC