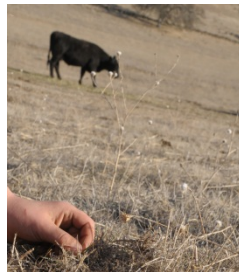


Sustaining Working Rangelands: Insights from Statewide Rancher Surveys & Interviews



Leslie Roche and Ken Tate
Rangeland Watershed Lab • UC Davis
rangelandwatersheds.ucdavis.edu



Yolo County Cattlemen and Wool Growers Association Meeting
Esparto, CA • 21 August 2014

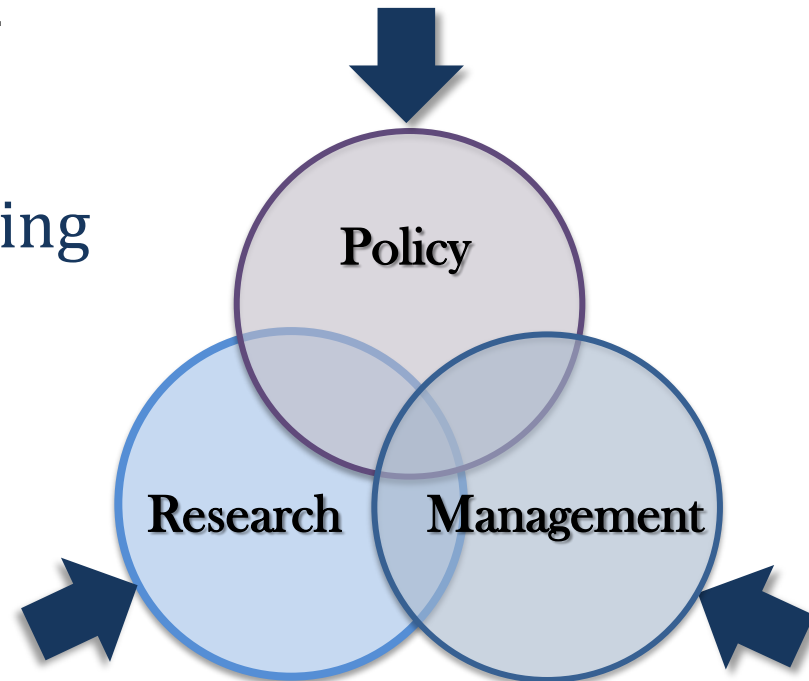
Sustaining Working Rangelands

Management of rangelands has become increasingly complex

- Economically and ecologically complex
- Growing societal demand for sustainable food systems
- Expanding expectations for conservation practices

Ongoing dialogue on sustaining working rangelands

- Critical need to include the ranching community
 - Perceptions
 - Experiential knowledge



Adaptive Rangeland Decision-Making

Rancher mail survey

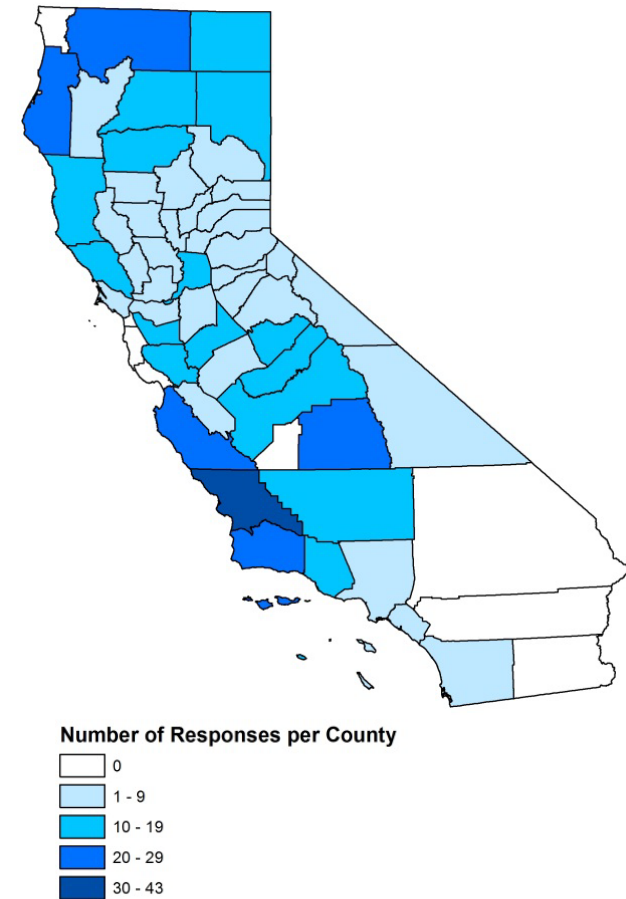
- March-June 2011
- 1700 producer members of CA Cattleman's Association
- 509 surveys returned

Semi-structured rancher interviews

- May 2013-August 2014
- 101 ranching families across CA

Adaptive Rangeland Decision-Making

Diversity and complexity of ranching operations.



	Mean	Median	Range
Total size (ac)	23,240	2400	0 – 5,090,000
Private owned (ac)	2,660	620	0 – 40,000
Private leased (ac)	3,230	250	0 – 100,000
Public leased (ac)	17,300	0	0 – 5,000,000
Irrigated lands (ac)	360	2	0 – 12,000
Total livestock	643	200	4 – 22,000
Cow/calf pairs	288	145	0 – 8000
Stockers	295	0	0 – 15,000
Sheep	181	0	0 – 8,200

Adaptive Rangeland Decision-Making

Demographics

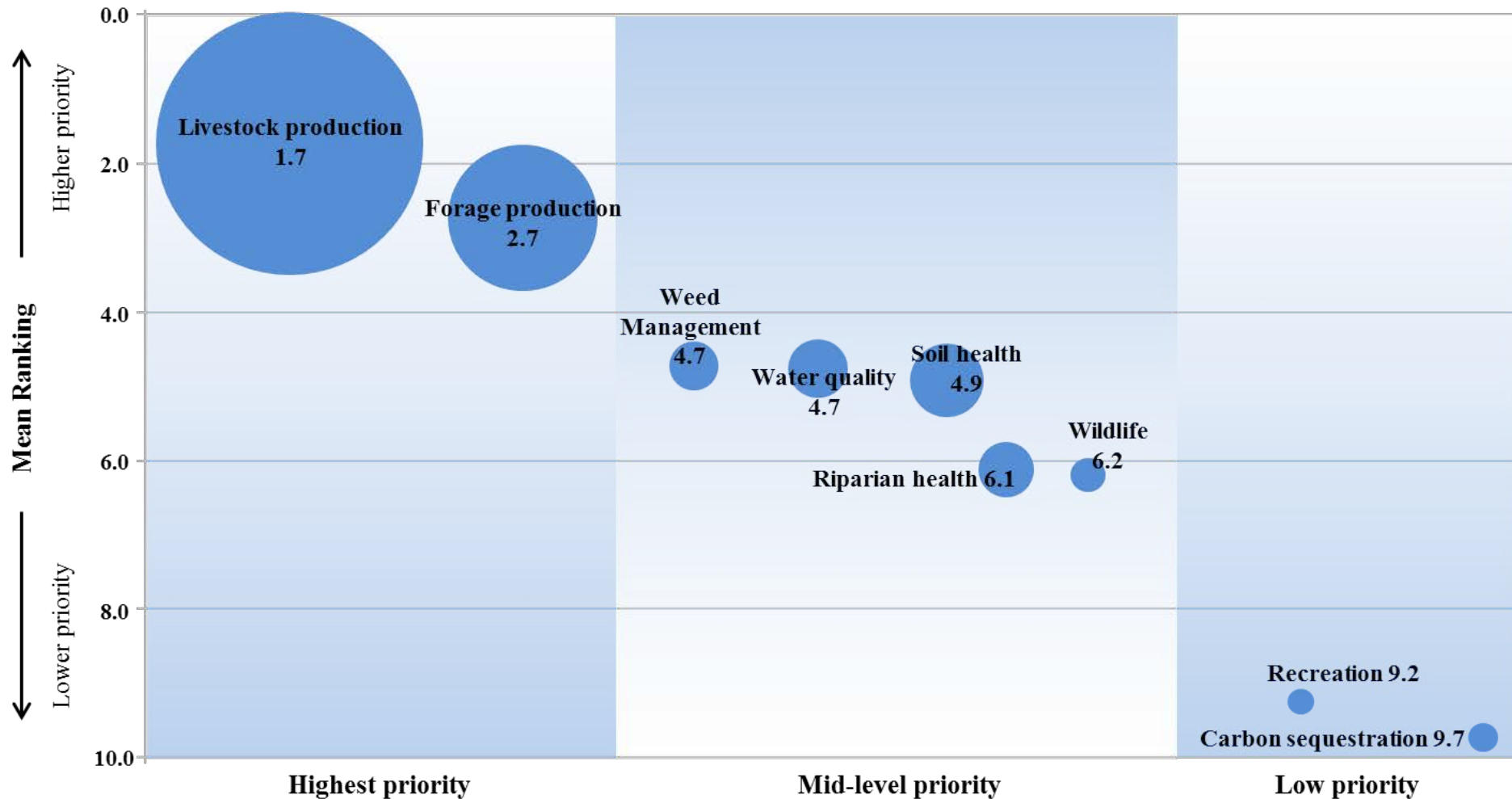
- Median age: 62 (range of 25-93)
- **70%** ≥ 3rd generation ranching
- **20%** 1st generation ranching

Ranch Economics

- **80%** have off-ranch employment
- **33%** have other agricultural production
- **65%** consider ranching a critical source of income
- **45%** have a succession plan in place (**26%** *in progress*)

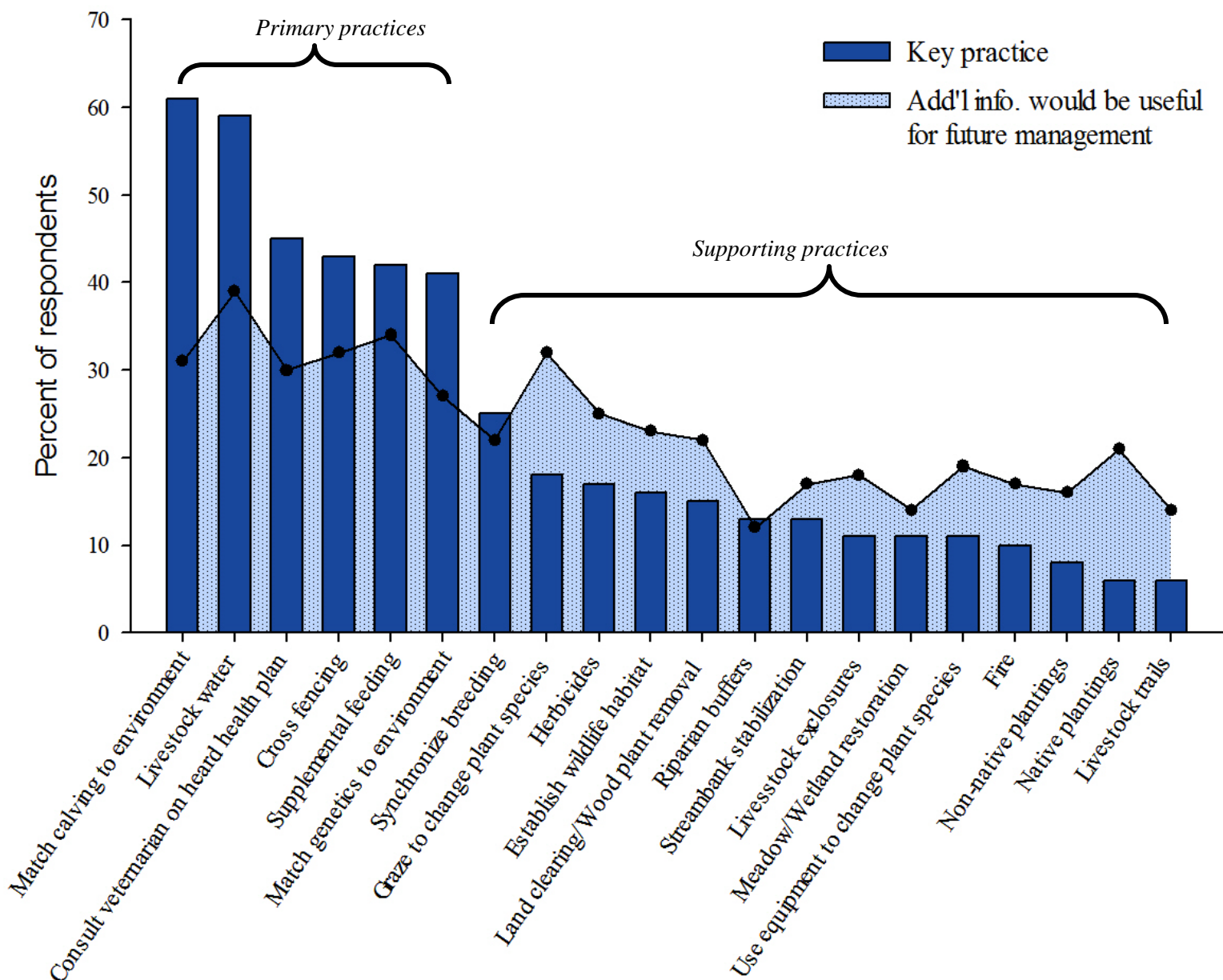


Agricultural and Natural Resources Goals



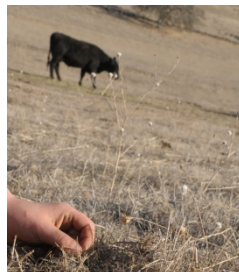
Bubble size corresponds to number of respondents indicating goal is #1 priority.
Value is average ranking for all respondents.

Key Management Practices



Conservation Programs Participation

- Williamson Act most critical conservation program for ranchers (>75%)
- ~40% of ranchers are actively involved or have plans to enroll in NRCS EQIP.
- ~35% of ranchers have or plan to enter into a conservation easement.

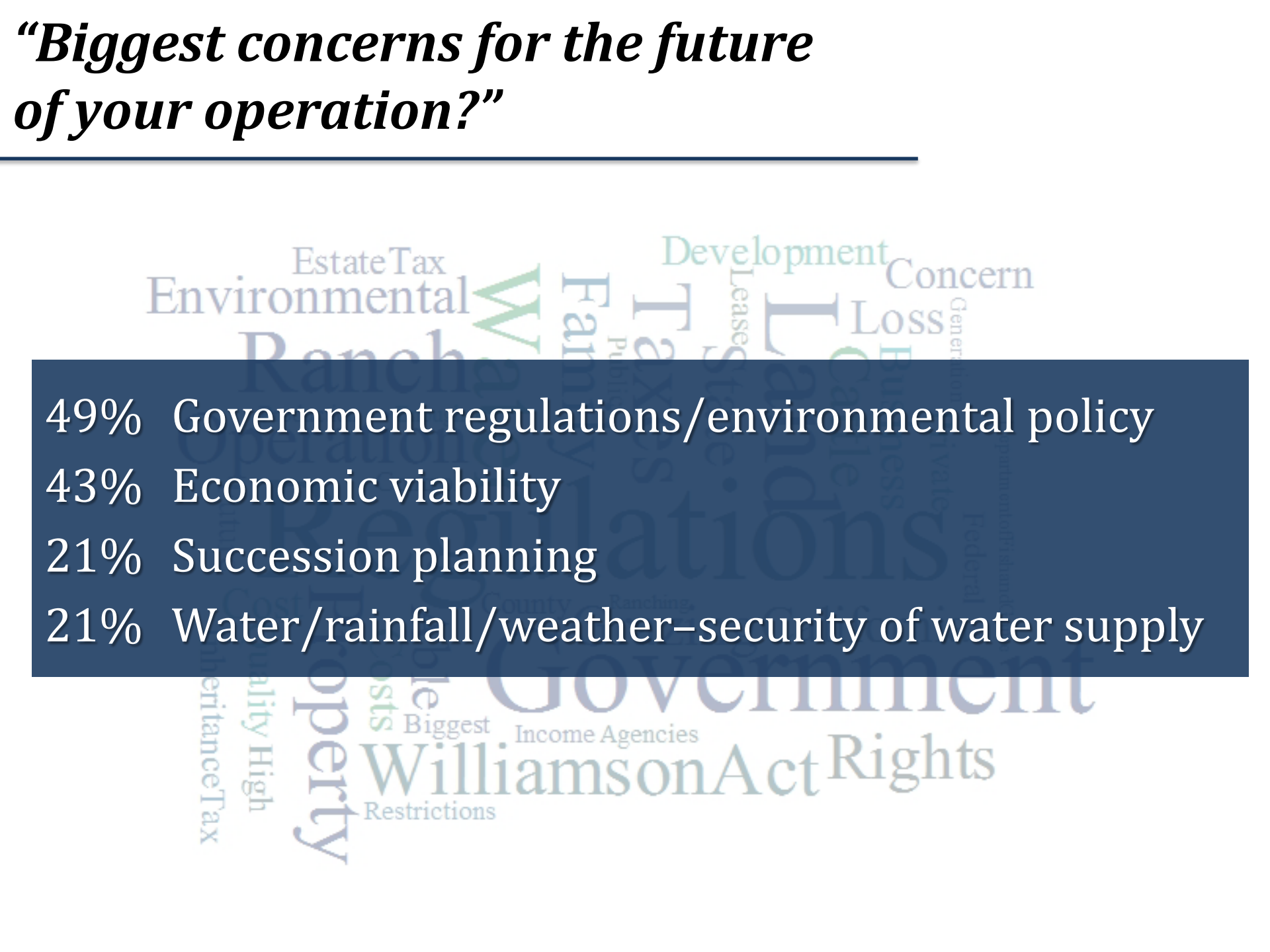


***“Biggest concerns for the future
of your operation?”***

“Biggest concerns for the future of your operation?”



“Biggest concerns for the future of your operation?”

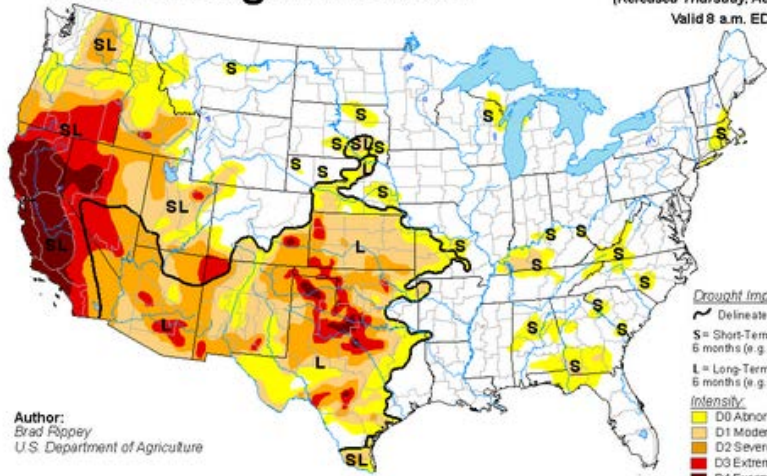
- 
- 49% Government regulations/environmental policy
 - 43% Economic viability
 - 21% Succession planning
 - 21% Water/rainfall/weather–security of water supply

Adaptive Rangeland Decision-Making: Surviving Drought



U.S. Drought Monitor

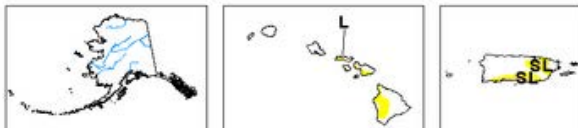
August 5, 2014
(Released Thursday, Aug. 7, 2014)
Valid 8 a.m. EDT



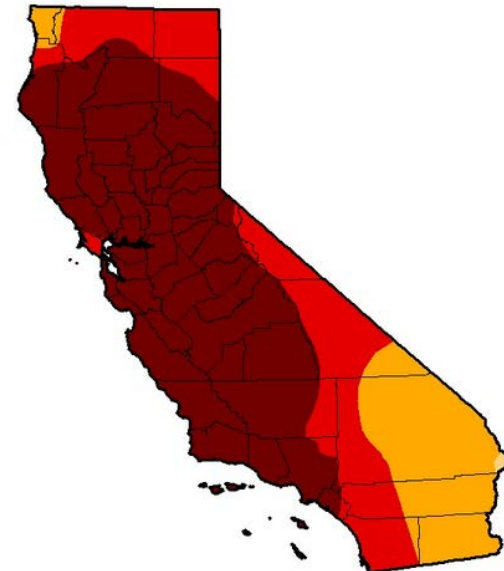
Drought Impact Types:
 ~ Delineates dominant impacts
 S= Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
 L= Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:
 D0 Abnormally Dry
 D1 Moderate Drought
 D2 Severe Drought
 D3 Extreme Drought
 D4 Exceptional Drought

Author:
Brad Rippey
U.S. Department of Agriculture



USDA
<http://droughtmonitor.unl.edu/>



August 5, 2014
(Released Thursday, Aug. 7, 2014)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D1	D2-D3	D3-D4	D4	SL
Current	0.00	100.00	100.00	90.86	81.82	58.41
Last Week	0.00	100.00	100.00	100.00	81.82	58.41
3 Months Ago	0.00	100.00	100.00	95.93	76.68	24.77
Start of Calendar Year	2.91	97.28	94.25	87.51	27.55	0.00
Start of Water Year	2.93	97.37	95.95	84.12	11.36	0.00
One Year Ago	0.00	100.00	88.23	83.86	0.00	0.00

Intensity:
 D0 Abnormally Dry
 D1 Moderate Drought
 D2 Severe Drought
 D3 Extreme Drought
 D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Brad Rippey
U.S. Department of Agriculture

USDA
<http://droughtmonitor.unl.edu/>

Drought Adaptation Strategies

% (n = 490)

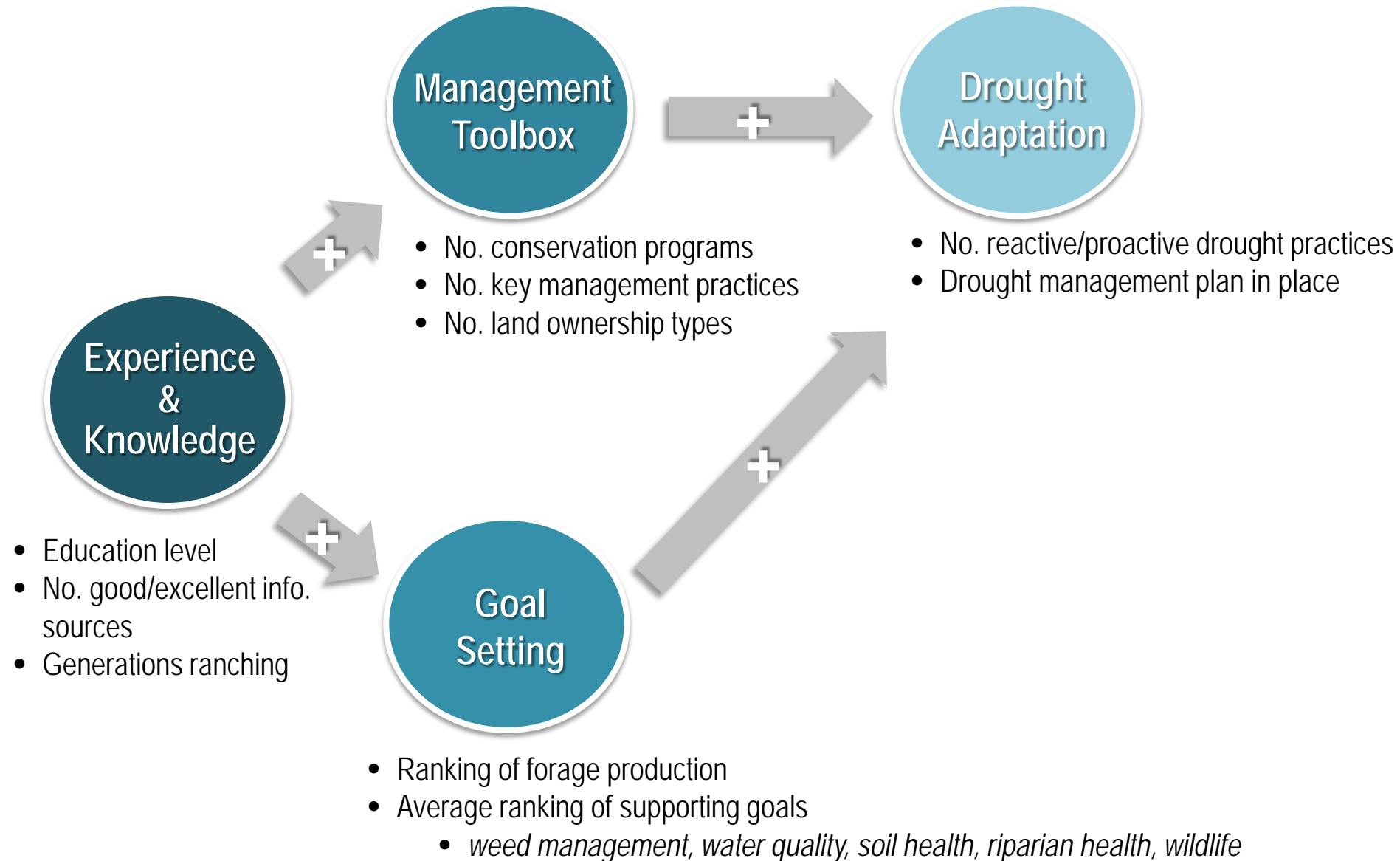
Proactive

Employ conservative stocking rates	34
Incorporate pasture rest into grazing system	23
Incorporate both cow-calf and stockers for flexibility	21
Grass bank/Stockpile forage	12
Use 1-3 month weather predictions to adjust stocking	11
Add other livestock types for flexibility	3

Reactive

Reduce herd size	70
Purchase feed	69
Apply for government assistance programs	39
Wean early	39
Rent additional pasture	26
Move livestock to another location	24
Earn off-ranch income	23
Sell retained yearlings	22
Place livestock in a feedlot	8
Allow livestock condition to decline	7
Add alternative on-ranch enterprise	4

Surviving Drought



Interviews and Field Surveys



- 101 semi-structured rancher interviews completed
 - Diverse strategies & goals
- ~30 land manager interviews
 - Agencies, NGOs
- Follow-up rangeland health and ranch productivity monitoring
 - Subset of participants
 - Annual monitoring



Interview Questions (*examples*)

Operation Characteristics

- 'Annual Forage Clock'
 - Big picture of different land and cattle types within operation
- Marketing Strategies

Goals & Management Strategies

- What are your management goals?
- What practices have been successful/unsuccessful?

Adapting Management

- How do you manage for drought impacts?
- If another drought were to begin this year, how severely would this impact the economic viability of your operation?
- If the frequency of drought were to increase, would your current strategies be adequate?

Perspectives

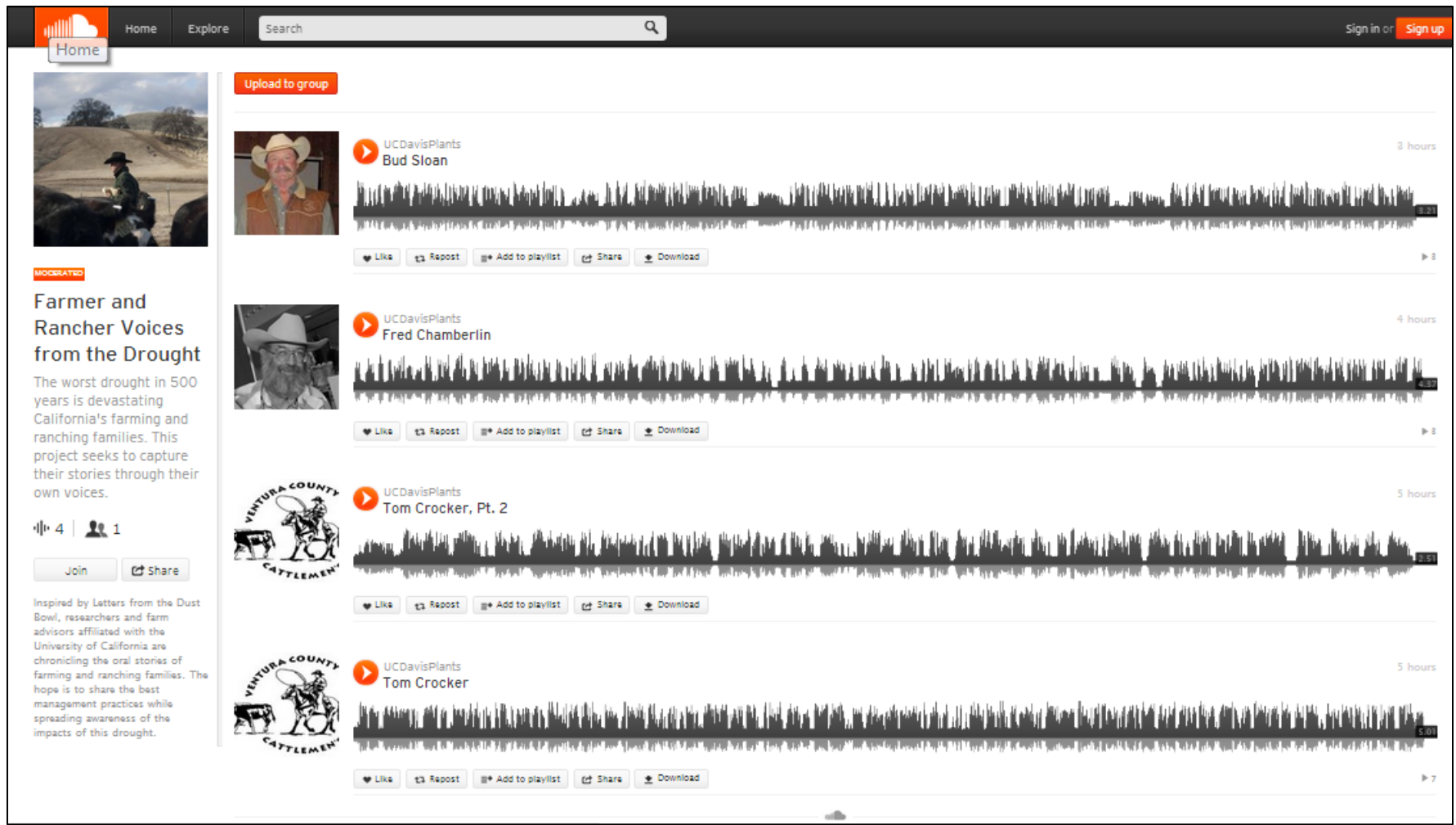
- Thinking about the next 10 years of rangeland research in California, what are some of the needs/challenges you feel the UCCE should focus on?
- What do you see as the major threats to California's Ranches and Rangelands?



Farmer and Rancher Voices from the Drought

A chronicle of oral stories of farming and ranching families.

<https://soundcloud.com/groups/farmer-and-rancher-voices-from-the-drought>



The screenshot shows a SoundCloud group page with a dark header. The header includes a 'Home' button, a search bar, and 'Sign in or Sign up' links. The main content area is divided into a left sidebar and a right main section. The sidebar features a 'Home' button, a 'Moderated' tag, a group photo of a person on a horse, the group title 'Farmer and Rancher Voices from the Drought', a description of the project, and a 'Join' button. The main section displays a list of audio uploads, each with a profile picture, name, title, waveform, and interaction buttons. The uploads are by UC Davis Plants and feature individuals Bud Sloan, Fred Chamberlin, and Tom Crocker. The 'Tom Crocker' uploads are accompanied by the Ventura County Cattlemen logo.

Home Explore Search

Sign in or Sign up

Home

Upload to group

MODERATED

Farmer and Rancher Voices from the Drought

The worst drought in 500 years is devastating California's farming and ranching families. This project seeks to capture their stories through their own voices.

4 | 1

Join Share

Inspired by Letters from the Dust Bowl, researchers and farm advisors affiliated with the University of California are chronicling the oral stories of farming and ranching families. The hope is to share the best management practices while spreading awareness of the impacts of this drought.

UC Davis Plants Bud Sloan 3 hours

Like Repost Add to playlist Share Download

UC Davis Plants Fred Chamberlin 4 hours

Like Repost Add to playlist Share Download

UC Davis Plants Tom Crocker, Pt. 2 5 hours

Like Repost Add to playlist Share Download

UC Davis Plants Tom Crocker 5 hours

Like Repost Add to playlist Share Download

VENTURA COUNTY CATTLEMEN

VENTURA COUNTY CATTLEMEN