A Hybrid Model Approach to Livestock Use for Research

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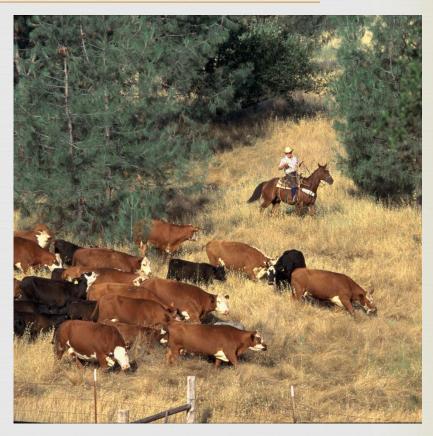




- 5700 plus acres of oak-studded annual grass rangeland
 - Growing season Nov. thru. May
 - Dry June through Oct.
 - Historically grazed annually (don't leave) by mature fall calving cows
 - Weaned heifers & steers retained through summer on irrigated pasture

Cattle Use Background

- Since 1960 grazed exclusively by ~350 commercial cows.
- Cattle owned by Campus Dept. and charged rent of 2 AUM (as of 2013)
- Cows available for research with some limitations if production was severely effected



Cattle Use Background



Mistorically this made sense

Cow/calf management

© Cow health

S Nutrition

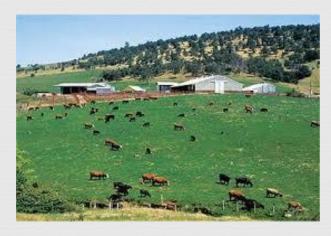
S Feeding trials





As the Center Progressed

- Changes in Research
 - **S** Natural resources
 - **Weed Control**
 - **S** Vaccine Development
 - Average Daily Gains



Demand was for the cow's calves and less on the cows themselves

Limitations with a Resident Herd

- Resource Limitations
- Higher amount of calves needed for research than we could support
- Demand for same sex calves for studies



Basically The Cows Had Become a Factory for the Research Samples Desired



Effects of this on the ANS herd

○ Foothill Abortion (EBA)

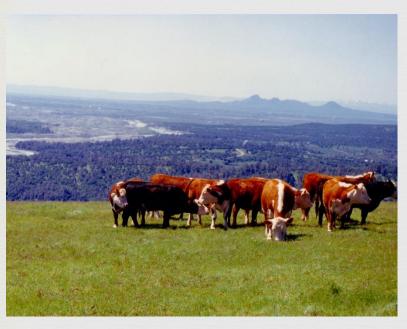
- All heifers calves born kept and bred
- 60 day calving season shifted to 150 day
- Research team not happy either



Something had to be Done

- Researchers not getting what they needed
- Herd nowhere near industry
- **©**Only a few livestock projects

Pilot that lead to the Hybrid model



- Carge Grazing study that started using Cows
 - Not enough critters
 - Not enough impact & treatment effects at key times
 - Animal management activities interfering with study

Contract with Industry

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Researcher input





Strategic Planning Process

- Was this the direction we wanted to go
- Stakeholder driven process
- **Results**
 - **Need More Capacity for Research**
 - Stability for the ANS cow herd



ANS Herd

- Reduced to 150 Cows
- Sustainable number year to year
- Guaranteed support for their animals regardless of research
- Callivestock only used for research if it made sense



Hybrid Approach

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Current Researchers

Grazing, EBA & Pinkeye

Other Researchers







Hybrid Approach

CB

- Grazing study added numbers
- CR EBA
 - 3 150 bred heifers
- Rink eye
 - 3 170 steers for 4 months
- Rice Straw feeding
 - S Fall, 100 heifers for 2 months



Hybrid model

- Never would have been able to carry enough animals to support the research demand
 - S Pink eye
 - CS EBA
- - Here when needed
 - S Piggy backing animals

Hybrid Approach Conclusion

- Thus Far it is not perfect, but its better than where we were and where we were headed

- Stakeholder buy in was, and will be critical to the success

