Rangeland Seeding and Ecosystem Service Restoration
Collaborative Team and Storyline

• George Gamble – Landowner / Producer
• Phil Blake – DC, NRCS Napa Co. (retired)
• Chip Bouril – NRCS Napa Co.
• Morgan Doran – Livestock & NR Advisor, UCCE
• Dave Dyer – NRCS PMC Director (retired)
• Leslie Roche – UCCE Specialist, UC Davis
• D.J. Eastburn – Asst. Specialist, UC Davis
• Elise Gornish – UCCE Specialist, UC Davis
Site History

Working Cattle Ranch
- Cow-calf beef
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- YST Infestation - 1999
  – Treated with Transline®
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Working Cattle Ranch
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• YST Infestation - 1999
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• 2001 – Jointed Goatgrass and Medusahead
• Engaged NRCS & UCCE
• Site burned 2003 & 2004
Turning project into research

Created replicated seeding trial

• **Annual seed mix**
  • *Annual ryegrass + vetch*

• **Native perennial mix**
  • *Purple needlegrass + blue wildrye + CA onion grass + CA brome*

• **Exotic perennial mix**
  • *Berber orchardgrass + Harding grass*

• **Native & Exotic perennial mix**

• **Seeding control**

Plots = 1.3 acres each
Drill seeded fall 2004
Cover of Invasive and Other Annual Species, Pre-burn 2003

- Desirable Annuals, 42%
- YST, 11%
- Medusahead, 18%
- Goatgrass, 29%
Data Collection

Line-point intercept

4 transects per plot

Take Home Messages:

• Species selection
  • Ability to survive and thrive
  • Desired outcomes/services
  • Cost

• Functional traits determine resistance to invasion

• Success is site dependent

• George Gamble’s perspective
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• Next Steps
  – Aerial images
    • Biomass
    • Livestock utilization
  – Other rangeland sites
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