Testing management tools for California weeds

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What are worried about here?

• Medusahead

• Barb goatgrass
What’s the problem?
Quick phenology

- Medusahead
  - Most seeds rapidly germinate in the fall
    - Practices that limit a single year of seed production can drastically reduce plant numbers

- Barb goatgrass
  - Half of the seeds germinate in the fall
    - Multiple years of seed reduction are necessary!

Tool box approach

- Cooperative extension’s role is to help you get where you want to go, not where we think you should go
- One size does not fit all
- We test the tools
- IPM approach
Effective?

- In this case 79% mh to 3.6% mh in yr 2 after burn
- We will see how long that lasts
- 900 vs 1,800 lbs of production the next yr!
Burn for Goatgrass

• Results look promising for goatgrass seed production, but...
• Germination test of burned vs. unburned seeds
  – Burned – 0%
  – Unburned – 60%

Chemical options – 51% to 4%
Effective?

• Yes, but expensive - $2.85/ounce @ 14 oz
• How long does it last
• Forbes

• Goatgrass
  – aminocyclopyraclor

Competition options
Current work
8 sites across CA
- Blue wildrye
- Flecha fescue
- Pubescent wheatgrass
- Hardinggrass
- Berber orchardgrass
- Annual ryegrass/soft chess
- Medusahead control

Grazing strategies
- Phenology work for proper timing
  - Use the plants late maturity against it
  - Defoliate late to reduce ability to make seed
  - Timing is critical
  - Weather, soil, etc cause variations in maturity

April 11th

April 30th
Grazing attraction - molasses

Effectiveness – Questionable at best

Grazing attraction - nitrogen
Grazing targeted
Don’t judge efficacy in a single year
Enter into grazing/weed management programs with long term goals!

• Late rains can highly impact success
  • Ending grazing hinges on many factors such as water availability
• We were mildly successful with cattle in one year with late rain
• In Yolo they were very successful
• Mowing at heading was very successful
• SFREC grazing project – Rangeland Watershed Lab

What if we never grazed?
Still coming...

- Economics of restoration and losses associated with mh invasion
- Different grazing strategies
- More competition strategies
- Goatgrass chemical options