

# Medusahead

## *Elymus caput-medusa*

### Identification and Response



Bonnie Eyestone, Partner Biologist  
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“It’s like a piece of land that’s stolen from you or your ranch that no longer produces feed.” – California Rancher

# Noxious Weed Management

Early Detection, Rapid Response! (EDRR)

1. Determine species of concern
2. Survey property
3. Properly identify noxious weeds
4. Implement control efforts
5. Repeat 1-4 as necessary

# Early Detection Rapid Response

## Key Principles

- Locate isolated weed infestations
- Document location
- Share infestation and control information with noxious weed networks
- Determine appropriate control methods
- Target small, isolated patches before working on large infestations
- Work from the outside - in

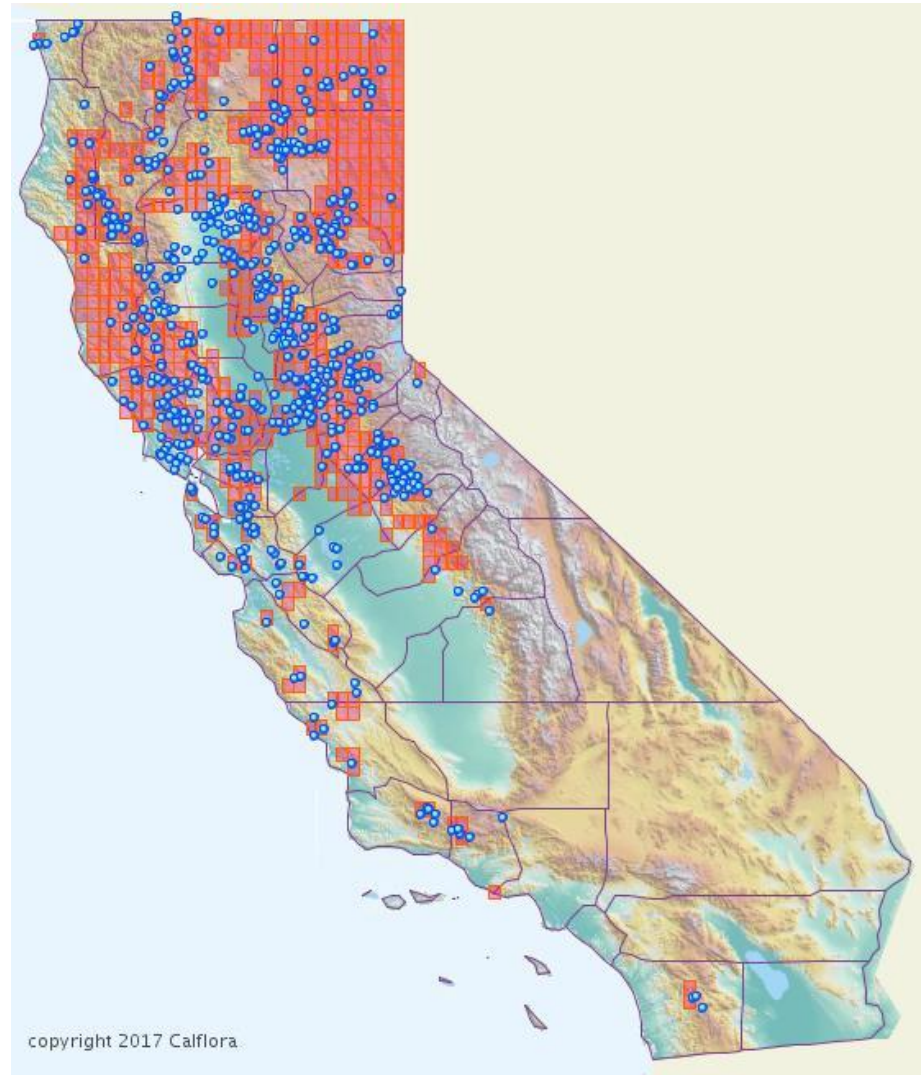
Success = Reduced range expansion

# Current Medusahead Distribution

Spreading southward

Small, local infestations

ID & treat now!



# Medusahead Biology

- Cal-IPC rating is “High”
- Non-native annual grass, originated in Mediterranean introduced to US in late 1800s
- Invades disturbed sites, grasslands, woodlands, below 6500’
- Winter annual, Blooms April – June
- Forms dense monocultures 1,000-2,000 plants / square meter
- Seeds do not need soil contact to germinate
- Focuses energy into root system during winter months
- Stays greener longer than other annuals
- Out competes slower-growing native species for nutrients and soil moisture



Photo Credit: Carol W Witham

# Medusahead Seeding

- Reproduces by seed, moved by wind, water, animals, and people
- 8-15 seeds per spike
- Seeds dispersed mid-summer
- Remain viable up to 6 months
- Germinates with first winter rains, high germ rate
- Seeds do not need soil contact to germinate



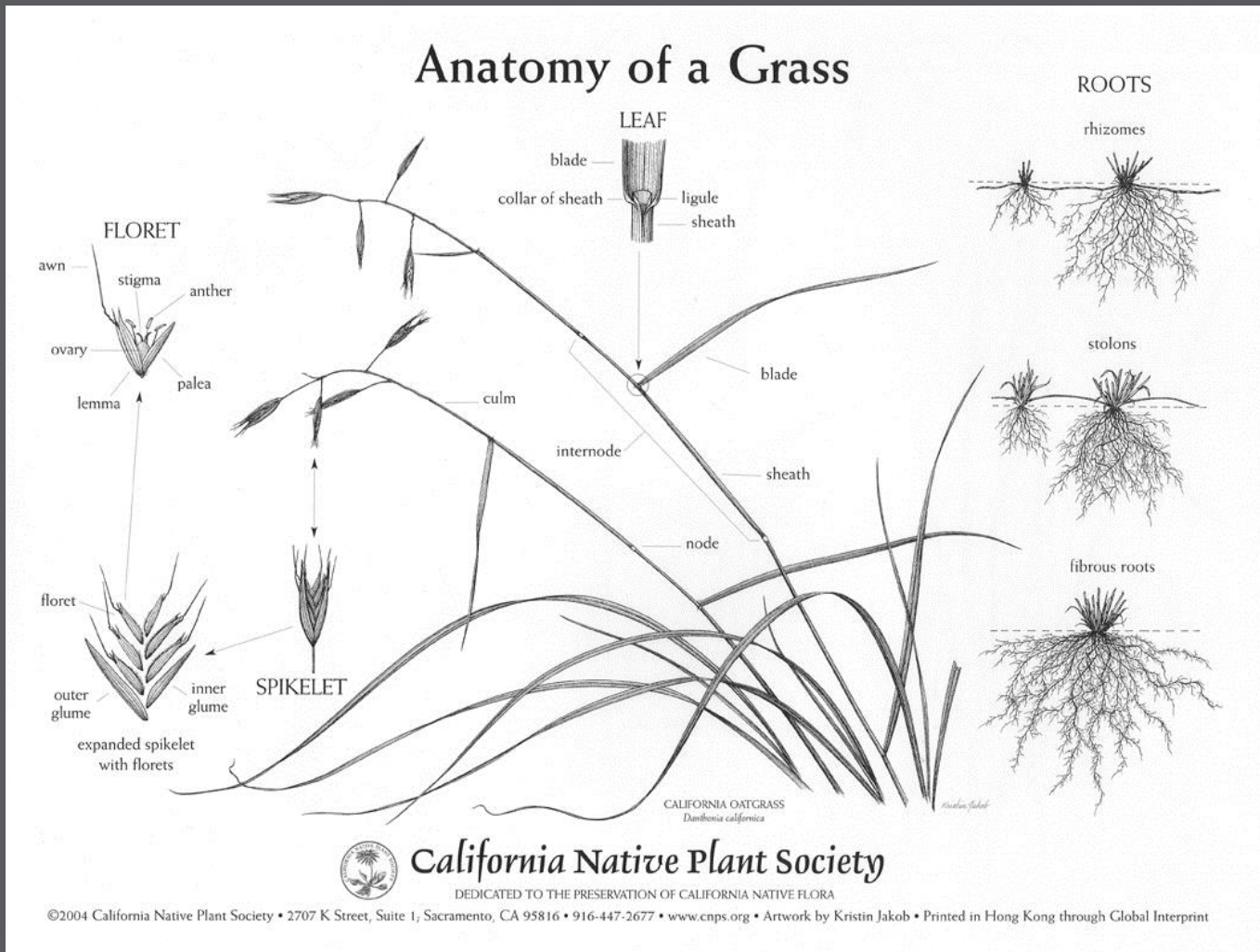
Photo Credit: CDFA

# Why worry about Medusahead?

- Forms thick thatch layer after seeding
- Prevents native or desirable species from germinating
- Excessive thatch increases wildfire risk
- High silica content makes grass unpalatable, but can be grazed in vegetative stage
- Awns can cause health problems in livestock
- Economic Loss: livestock weight gain, palatable forage
- Habitat Loss: diminished plant diversity for wildlife habitat
- Ecosystem Services loss: reduced nutrient cycling and ecosystem function

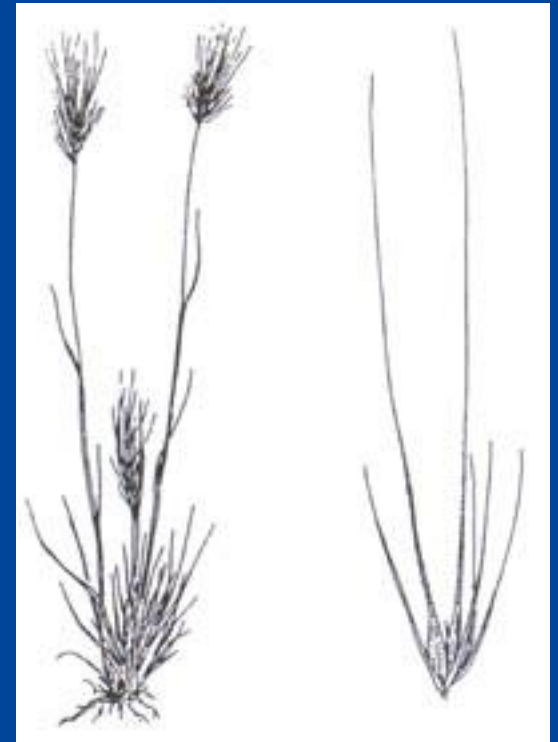


# Grass Identifying Characteristics



# Medusahead Identifying Characteristics:

- Color: yellowish-green>light gray-tan
- Size: wiry, slender, 8-24 inches tall
- Leafblade: Glabrous, 1-3mm wide
- Seedheads: inflorescence 1.5-5 cm, excluding awns.  
Awns 2.5-7.5 cm
- Glumes: awn-like 1.5-4 cm
- Awns: straight when green, twisting when dry



A close-up photograph of a plant's awns, which are long, thin, and dry, showing a distinct twisting or curling pattern. The awns are light brown or tan in color and are densely packed along the stems. The background is a blurred, dark brown, suggesting a natural, possibly arid or semi-arid, environment. The text "Dry, twisty awns" is overlaid in white in the upper left quadrant.

Dry, twisty awns

Photo Credit: Joanna Clines



# Other weeds to watch out for



Spotted Knapweed  
Photo Credit: Neal Kramer



Yellow Starthistle  
Photo Credit: Carol W. Witham



Cheatgrass  
Photo Credit: James M. Andre



Barbed goatgrass  
Photo Credit: Carol W. Witham



Thank you!

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# Point Blue

Conservation science for a healthy planet.

- Founded in 1965 as Point Reyes Bird Observatory
- 140 seasonal and full time staff
- 2013 budget: \$10.3 million
- Working to reduce the impacts of environmental change and promote nature-based solutions for wildlife and people



# Point Blue

Reducing the impacts of habitat loss, climate change, and other environmental threats while promoting nature-based solutions for wildlife and people.

- Founded in 1965 as Point Reyes Bird Observatory
- 140 seasonal and full time staff
- 2013 budget: \$9.7 million
- Advancing conservation through science, partnerships, outreach

