

# **Managing Weed Problems in Pastures**

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# Background on Weeds in Pastures

- **Serious weed problems in pastures are a symptom of a problem with the crop or site.**
- **Problems can include grazing methods, fertilization, forage species, and water management**
- **It is usually more appropriate to look for ways to manage the forage and the site to prevent or reduce weed problems**

# Background on Weeds in Pastures

- **Healthy and well-established forage plants have a good chance to resist weed invasions**
- **Therefore it is important to learn to manage desirable forage species to make them as competitive as possible with weeds**

# Areas to Focus on...

- High traffic sites such as around gates, water troughs, feed bunks, bedding grounds, roadways, and fence lines should be the first to receive attention



Gates



Feeding Areas

## Areas to Focus on...

The soil is often disturbed in these areas and forage plants are often sparse, and as a result, these areas are prone to invasion by weeds and they first become established there



# Managing the Pasture

- **Anything that we can do to make the pasture stronger and more competitive will help reduce weed problems**
- **This may include**
  - **Changes in grazing management**
    - **Reducing stocking rates; rotational grazing; resting pastures, etc**
  - **Over seeding with desirable forage species**
  - **Direct weed control efforts**

# Desirable Forage Species

- **Grasses**
  - Blando brome, ryegrasses
  - Perennials - orchard grass, ryegrass, tall fescue
- **Legumes**
  - Rose and subclovers
- **Forbs**
  - Many including filaree

A photograph of a Soft Chess Blando Brome grass plant. The plant is a clump of green grass with several upright, slender stems. Each stem has a single, elongated, spike-like inflorescence (panicle) at the top. The panicles are green and appear to have a soft, feathery texture. The plant is growing in a field of dark brown soil with some dry, brown grass and other vegetation scattered around. The background is slightly out of focus, showing more of the same type of grass.

**Soft Chess  
Blando Brome**

# Ryegrass species

Late, needs adequate moisture, highly productive



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**Wild Oats**  
**Common grass**  
**Species in wetter and**  
**Higher fertility sites**



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A close-up photograph of Ripgut Brome grass. The grass has long, thin, green blades with a reddish-purple tinge. The seed heads are elongated and have a similar reddish-purple color. The background is a blurred field of the same grass.

**Ripgut Brome**  
**Excellent Forage Prior to Heading**

# Foxtail or Hare Barley

Tolerates  
compacted soil



**It can be reduced by waiting until after the first germinating rain, spraying with glyphosate and overseeding with blando brome**



**Blando  
Brome**

**Foxtail**

A close-up photograph of a Burr Clover plant. The plant features numerous small, rounded, green leaves with a slightly serrated edge. Interspersed among the leaves are several clusters of small, bright yellow flowers. The background is a soft, out-of-focus green, suggesting a natural outdoor setting. The text "Burr Clover" is overlaid in white on the right side of the image.

**Burr Clover**



Rose Clover



Subclover

# Filaree (three species) very Important Forage Species for California



# Poisonous Plants

- **Fiddleneck**
- **Groundsel**
- **Yellow Star Thistle**
- **Poison Hemlock**

# Fiddleneck

Seeds are poisonous



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# Yellow Star Thistle



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<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7402.html>

# Groundsel Grows Year Round



# Poison Hemlock



# Affect Forage Quantity & Quality

- **Thistles**
- **Mayweed**
- **Horehound**
- **Medusa Head**
- **Cocklebur**
- **Spiny Cocklebur**

# Italian Thistle

## Common in this area



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**Mayweed**



**Horehound**

# Wild Radish



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# Medusa Head





**Cocklebur**

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**Spiny Cocklebur**

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# Direct Action Needed

## 1. Small infestations of new weeds

- Need to be on the look out each year
- Maybe able to control by hand or spot spraying

## 2. Poisonous plants

- Direct control measures
- Adjusting grazing timing and intensity

## 3. If weeds become so dense or undesirable perennial weeds become abundant

# Cultural Controls

- Early detection & hand pulling/spot treatment
- Grazing management
- Tillage
- Over seeding
- Mowing
- Burning
- Biological control



# Site Renovation

- **When forage deteriorates to the point that corrective measures are necessary, the question is how best to correct the situation**
  - **Starting over by tillage**
    - **May allow new weed seed to come to the surface**
    - **Land is out of production for a period of time**
    - **Nothing has been done to prevent future deterioration**
    - **Soil is susceptible to erosion (depending on time of year)**

# Reseeding

- **Need to assess the areas that are in need of reseeding**
- **If it is not practical or economical to over seed the entire pasture, consider seeding the high traffic and other disturbed sites**

# Reseeding

- **It is important that the forage species and variety be carefully selected for the site and the objectives**
- **Periodic over seeding has the have potential to influence crop growth and ability to compete with weeds**

# Reseeding

- **Drills**
- **Hand spreading**
  - **Followed by incorporation of the seed by harrowing or running the animals on the site to push the seed down and make better soil contact**
- **Animal spread of seed**

# Reseeding

- **It is good to start planning in early fall**
- **It is good to work with the weather**
  - **Seeding before the first rain vs waiting for later rains**
- **For legumes October 15 is a good date to have the seed sown and, if possible, irrigated up to assure vigorous growth**

# Chemical Control

- **Selective**
  - **Control broadleaf weeds, but do not kill grasses**
    - 2,4-D; Shark, Buctril, Milestone, Transline, Garlon, MCPA, Banvel
- **Non-selective**
  - **Will kill both broadleaves and grasses**
    - Roundup, paraquat



# Chemical Control

- **Some chemicals are more active on some weeds than others and it is very important to check on their spectrum of control prior to using them**
- **Each material will have material on the label regarding the interval between treatment and when the site can be used again for forage**

# Herbicide Susceptibility Chart\*

	Buctril	Shark	Transline	Banvel	Roundup	MCPA	Paraquat	Garlon	2,4-D	2,4-DB	Milestone
ABINDWEED	N	P	N	P	P	N	N	P	P	N	
ACLOVER	N	-	C	C	P	N	P	C	P	N	
ACOCKLEBUR	P	P	C	C	C	C	C	-	C	C	
ACUDWEED	C	-	C	P	C	P	N	-	P	P	
ADOCK(Se)	C	-	C	C	C	C	C	C	C	C	
AFIDDLENECK	C	C	N	C	C	P	P	-	P	P	C
AFILAREE	N	-	P	C	P	P	P	P	C	C	
AFLEABANE, HAIRY	C	N	-	C	C	C	P	-	C	C	
AGROUNDSEL	C	-	C	C	C	N	C	C	C	N	
AHORSEWEED	C	N	P	C	C	C	P	C	C	C	
AMALVA	P	C	N	P	P	P	P	N	P	P	
AMINERS LETTUCE	P	-	-	-	C	-	C	-	-	N	
AMORNINGGLORY, ANNUAL	C	C	N	C	P	P	P	-	C	P	
AMUSTARD	C	P	N	C	C	C	C	C	C	C	
APLANTAIN, BUCKHORN	C	-	N	C	C	C	C	C	C	C	
APRICKLY LETTUCE	C	-	C	C	C	C	P	C	C	C	
APUNCTURE VINE	C	-	N	C	C	C	C	-	C	P	
A RUSSIAN THISTLE	C	-	N	C	C	P	C	P	C	P	
A STAR THISTLE, YELLOW	P	N	C	C	C	P	C	P	C	P	C
ATURKEY MULLEIN	N	-	N	P	P	N	P	-	P	-	
AWILD RADISH	C	P	N	C	C	C	C	C	C	C	
AWILLOWHERB, PANICLE	-	-	N	-	P	P	N	-	C	-	

\* C = controlled; P = partial control; and N = no control

# Summary

- **Keys to long term success**
  - **Be vigilant of new introductions**
  - **Be consistent (weeds do not take vacations)**
  - **Manage grazing to benefit forage plants**
  - **Prevent weed seed introduction**
  - **Effective treatment and follow-up programs**