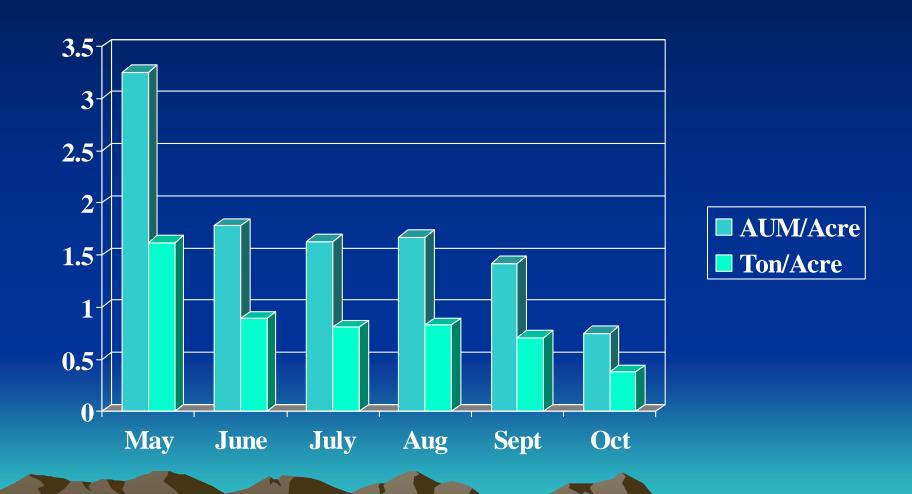
Blackberry Management

Larry Forero 10/1/2010



Average Irrigated Pasture Production on five Foothill Ranches in Shasta County



Opportunities to improve Irrigated Pasture Management

Grazing management

Water management

Fertility

Brush management

Weeds and things... Take Blackberries for instance...

- Imagine a field 667 feet x 667 feet (ten acres)
- This field has as blackberries protruding 10 feet into the field around the entire perimeter of the field but there are none in the field itself.
- The area encompassed by the blackberries is .60 acres—over 5% of the entire field.













Wild Blackberries

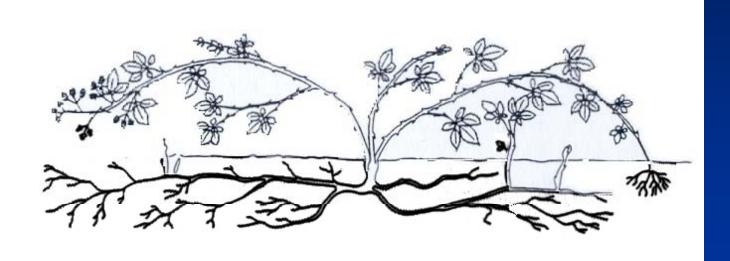


Figure 5. Vegetative growth of a blackberry plant from a central crown.

Blackberry Biology

- Seeds spread readily by wildlife
- Produce canes from central cane as well as from rhizomes
- Can live 25 years
- May be self pollinated or by honey bees

More blackberry trivia...

- Produce vines from a central crown or from buds that form along rhizomes
- 1st year canes do not produce flowers
- 2nd year the canes fruit and die
- Tips of first year canes that contact the ground form roots at the nodes



Tools available to help manage blackberries

Burning

Mechanical

Biological Control

Herbicide

Burning

- Can reduce canopy short term
- Not a good longtem strategy because they will resprout

Mechanical Control

- Wild blackberries can be controlled by REPEATED tillage
- Bulldozing can cause resprouting and can spread the pest by means of root and stem fragmentation
- Mowing is not effective because it stimulates formation of suckers from lateral roots and induces branching

Biological Control

 None really in US. In Australia, blackberry leaf rust has been released for control of the weed. Generally not considered successful because the rust has not caused significant damage to its host

Common Herbicide Products

Glyphosate (Round-up)

Trichlopyr (Garlon 4—61.6% Trycholpyr)

Trichlopyr/2,4-D (Crossbow—34.4% 2,4-D, 16.5% Trichlopyr)

As a review...

- 2 cups/pint
- 2 pints/quart
- 4 quarts/gallon
- 8 fluid oz/cup
- 16 fluid oz/pint
- 32 fluid oz/quart
- 128 fluid oz/gallon

READ AND FOLLOW ALL LABEL INSTRUCTIONS!!!

Quick and dirty...

Product	Operator ID?	Restricted Materials Permit Required?	NOI?	Use Report?
Round-up	YES	NO	NO	YES
Garlon	YES	NO	NO	YES
Crossbow	NO	YES	YES	YES

More quick and dirty...

Product	Rate	Water	Timing	
Round-up (41% Active Ingred)	.5-1.5%	0.6-2 0z/gallon water	Late summer or early fall	Spray foliage to wet
Garlon 4	1%	1.25 Oz/Gallon	Midsummer and later	Spray foliage to wet
Crossbow		1.25 Oz/Gallon	Midsummer and later	Spray foliage to wet

REMEMBER TO USE A SURFACTANT!!

How much can you afford to spend on range pasture improvements?

- This is tough to figure—If you believe the Shasta Co. Ag.
 Commissioner's report that IP has a rental value of \$100/acre/year we can get to an answer
- Using our blackberry example, if we assumed a five year life of the project (with a little effort, the life should be much, much more) \$300 could be spent (0.60 acres*\$100/acre*5 years)
- Remember that if the only way to get back the improvement investment is to harvest the forage (usually by increasing the number of grazing animals

What to do...

- Think carefully the goals for your property/operation/life.
- Blackberry control/management requires persistence
- Try to work on projects with measurable objectives that move you along towards your goal
- Remember the rules...