Thinking of supplement feed costs

Josh Davy

Larry Forero

UC Farm Advisors

UC CE | University of California
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How bad is this year? Likelihood of being saved?

SFREC production clipping

- Current through February production = 98 lbs/acre
- Average is 515 lbs/acre
  - Lowest ever recorded since clipping began in 1998
- Closest 2nd was 1990-91 with 162 lbs/acre
  - That was the "Miracle March" year
  - Ended up with 86% of normal total forage production

BOTTOM LINE…ODDS ARE THIS WILL BE A POOR YEAR

Point of the presentation

- Not to tell you what you should do
- Consider the costs of supplementing
- Consider the value of the current market for culling
- Assist you in making your decisions

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Feeding Rice Straw to Cattle

DANIEL J. DRAKE, University of California Cooperative Extension Livestock Farm Advisor, Siskiyou County; **GLENN NADER,** University of California Cooperative Extension Livestock and Natural Resources Farm Advisor, Sutter/Yuba/Butte Counties; **LARRY FORERO,** University of California Cooperative Extension Livestock and Natural Resources Farm Advisor, Shasta and Trinity Counties.

UNIVERSITY OF CALIFORNIA
Division of Agriculture and Natural Resources
http://anrcatalog.ucdavis.edu

Feed is the largest single cost of producing beef. Producers who have access to alternative feeds often have economic advantages due to the lower costs of production. However, alternative feeds can present challenges due to variable consistency, variable supply, potential toxicants, and unusual composition. Rice straw, a by-product of the rice grain industry in Northern California, is a potential alternative feed for cow and calf producers. Increasing regulations and restrictions on burning rice straw has stimulated interest in using it for other purposes, including cattle feed.

Because rice straw has limited nutritive value (low crude protein and digestibility), it should be used only as a replacement for part of the forage in a ration. It should not be used as a complete ration. Studies of feeding rice straw have shown mixed results, depending on the quality of the straw and how it was used in the ration (see Garret 1978; Garrett and Dunbar 1992; Hull et al. 1972; Nader 1999, 2000; Nader et al. 1998). Poorer animal performance has usually occurred when rice straw was the only feed.

UC PEER REVIEWED

Management by rice growers to produce higher-quality rice straw permits cattle producers to use rice straw as a feed. In this way, straw, a by-product for the rice grower, does not become an air-quality hazard when burned and is converted instead into high-quality human food.

KEYS TO MAKING RICE STRAW WORK IN YOUR CATTLE FEEDING OPERATION

- Make sure the rice straw was baled within 10 days of harvest.
- Test the rice straw for crude protein and ADF, preferably before purchase.
- Determine what other feeds or supplements will have to be provided to meet the nutritional needs of animals.
- Compare costs of feeding options or alternatives.

- UC Peer Reviewed
- 18 pages
- Online http://anrcatalog.ucdavis.edu/pdf/8079.pdf
- See handout for other feeds description

Extension

Just for consideration passing this around

Shells with Hulls

Hulls

Options to supplement

Feed	$/ton
Roughages	
Alfalfa	$230
Oat hay	$230
Rice straw	$70
Wheat straw	$100

Feed	$/ton truckload
Concentrates	
Rolled corn	$230
Cottonseed	$545
Oat grain	$350
Soybean meal	$593
Canola	$455
Rice bran	$250
Almond hulls	$155
Rolled barley	$290
Corn gluten	$340
Distillers grains	$342
Canola	$455

Cost per lb of nutrient

- Think of supplements in terms of $/lb of protein (CP) or energy (TDN)
- i.e.
  - Corn at $230 per ton – 89% TDN
  - Alfalfa at $230 per ton – 60% TDN, but CP and Ca
  - See handout for specifics on feeds i.e. feed ramp-up etc.
  - Taurus ration program can help calculate for you

Calving cow examples

- 1,200 lb cow at calving
- A maximum of 20% DM of diet from fall type feed
- Just maintaining, no added gain
- Your situation may vary, contact us if you want to input your specifics
- In this case range is put in as a cost of $0

Example least cost ration

ALL FEEDS in the ration	AS FED BASIS: lb/day	%	DRY MATTER BASIS: lb/day	%
RICE straw	12.046	43.671	10.962	51.065
RANGE Wld lat fall g	8.580	31.106	4.290	19.985
CORN grain flaked	5.293	19.189	4.711	21.945
RICE bran sol-extd	0.929	3.369	0.836	3.896
ALFALFA early bloom	0.552	2.002	0.497	2.316
COTTON sd w/o hulls	0.183	0.664	0.170	0.793
Total Ration.....	27.583		21.466	
Cost, $/day.....	1.27			
Cost, $/ton.....	91.75		117.89	

With a >2 ton order grain would be premixed

What if grain is not an option

- Again, 20% of diet DM can be range
- Options included – Remember just an ex.
  - Oat hay $230
  - Alfalfa $230
  - Rice straw $70
  - Wheat straw $100

Roughage only ration

ALL FEEDS in the ration	AS FED BASIS: lb/day	%	DRY MATTER BASIS: lb/day	%
ALFALFA early bloom	15.565	56.344	14.009	65.260
RANGE Wld lat fall g	8.580	31.058	4.290	19.985
RICE straw	3.475	12.580	3.162	14.732
Taurus Phosphorus	0.005	0.018	0.005	0.023
Total Ration.....	27.625		21.466	
Cost, $/day.....	2.56			
Cost, $/ton.....	185.24		238.39	

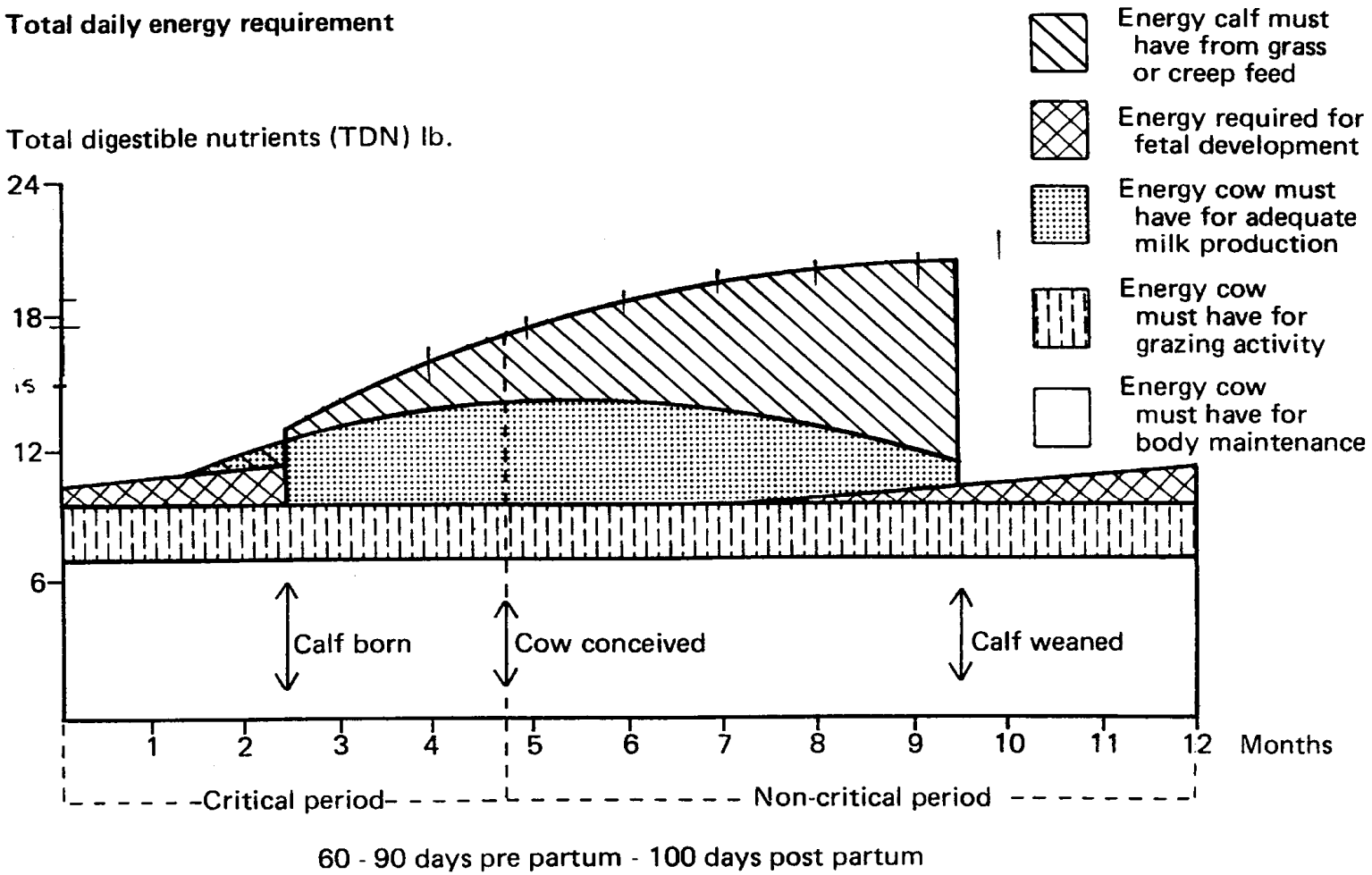


Fig. 1. Estimated energy requirements of a mature, 1,000-pound beef cow during her 12-month reproductive cycle, based on a 90-day calving season and 500-pound calf at 7 months of age (Ensminger).

What about a weaned calf

- Same as before 20% of diet from range
- ADG calculated by the cheapest cost per lb of gain
- Starting at a weight of 400 lbs

Weaned calf ration

ALL FEEDS in the ration	AS FED BASIS: lb/day	%	DRY MATTER BASIS: lb/day	%
CORN grain flaked	5.569	38.248	4.957	43.902
RANGE Wld lat fall g	4.400	30.217	2.200	19.486
ALFALFA early bloom	4.112	28.237	3.701	32.776
RICE bran sol-extd	0.391	2.682	0.352	3.113
RICE straw	0.090	0.616	0.082	0.722
Total Ration.....	14.561		11.290	

Costs of gain with grain included

LEAST COST GAIN

Starting Weight, lb	400.00	
Ending Weight, lb	500.00	
Average Weight, lb	450.00	(DM Intake 2.51% of Body Wt)
Days on Feeding Phase	46.29	

	Whole Phase	Per Day	Per lb of Gain
Gain, lb	100.00	2.16	-----
Feed Intake, DRY MATTER, lb	522.58	11.29	5.23
Feed Intake, AS FED, lb	673.98	14.56	6.74
Feed Cost, $.....	55.84	1.21	0.56
Overhead Cost, $.....	9.26	0.20	0.09
Feed & Overhead cost, $.....	65.10	1.41	0.65

Feed Cost: 165.70 $/English ton AS FED

Cost of gain without grain

ALL FEEDS in the ration	AS FED BASIS: lb/day	%	DRY MATTER BASIS: lb/day	%
ALFALFA early bloom	9.177	64.970	8.259	75.373
RANGE Wld lat fall g	4.400	31.150	2.200	20.076
RICE straw	0.548	3.880	0.499	4.551
Total Ration.....	14.125		10.958	
Cost, $/day.....	1.17			
Cost, $/ton.....	165.14		212.87	

Cost of gain without grain

Starting Weight, lb	400.00	
Ending Weight, lb	500.00	
Average Weight, lb	450.00	(DM Intake 2.44% of Body Wt)
Days on Feeding Phase	125.00	

	Whole Phase	Per Day	Per lb of Gain
Gain, lb	100.00	0.80	-----
Feed Intake, DRY MATTER, lb	1369.76	10.96	13.70
Feed Intake, AS FED, lb	1765.64	14.13	17.66
Feed Cost, $.....	145.79	1.17	1.46
Overhead Cost, $.....	25.00	0.20	0.25
Feed & Overhead cost, $.....	170.79	1.37	1.71

Consider

- This is just a computer program
  - It is as good as the assumptions entered
  - Consider time to acclimate cattle to ration!
  - Consider the infrastructure to feed grain rations
  - Consider the range intake variable
    - Maybe you are none or you are more
      - Everyone is different here

February 7, 2014

RECEIPTS: This Week: 1657 Last Week: 3275

COMPARED TO LAST WEEK: Slaughter cows and bulls $2 higher. Steers under 550 lbs mostly steady; 550-650 $10 lower on light supply; over 650 mostly steady. Heifers mostly $8-$12 lower except 3-weights and few 8-weights steady to $3 higher. Off lots $10-$40 below top.

SLAUGHTER COWS:		High Dress		Low Dress	
Breakers:	78.00-86.00	87.00-99.00			
Boneing:	68.00-77.00				
Cutters:	57.00-67.00				
BULLS 1 & 2:	75.00-94.00	95.00-105.00			

FEEDER STEERS:					
Top Offerings/Pen Lots	300-400	210.00	to	260.00	
	400-450	200.00	to	232.00	(few)
	450-500	195.00	to	217.00	
	500-550	190.00	to	214.00	
	550-600	170.00	to	195.00	(few)
	600-650	165.00	to	180.00	
	650-700	165.00	to	183.00	
	700-750	150.00	to	166.50	
	750-800	156.00	to	165.00	(few)
	800-900	146.00	to	160.00	

FEEDER HEIFERS:					
Top Offerings/Pen Lots	300-400	190.00	to	247.00	
	400-450	xxxx	to	xxxx	
	450-500	170.00	to	191.00	
	500-550	160.00	to	181.00	
	550-600	155.00	to	173.00	
	600-650	155.00	to	172.50	
	650-700	155.00	to	172.00	
	700-750	147.00	to	152.50	
	750-800	xxxx	to	xxxx	
	800-900	140.00	to	146.50	(few)

PAIRS: Few running age & older pairs $1450-$1575

CALVY COWS: Few cows ranging from very thin to running-age in good flesh

$725-$1310

NEXT WEEK (Feb. 14): Expecting 1500 head including 2 loads of pairs

Feb. 12: Consignment deadline for special added Western Video Market sale

Growing Cattle-GRAIN RATION

What are they worth?	Wt Each (cwt)	Unit	Total Hd or Units	Price or Cost/Unit	Total Value
Steer Calves	**4.00**	head	1	$ 235.00	$ 940.00
Steer Calves	**5.00**	head	1	$ 202.00	$ 1,010.00
Change in Value					**$ 70.00**
Feed Cost					
Grain Ration- 2.15 adg, $1.41/day		days	46	$ 1.41	$ 64.86
Return over cost					**$ 5.14**

Growing Cattle-NO GRAIN RATION

What are they worth?	Weight Each (cwt)	Unit	Total Hd or Units	Price or Cost/Unit	Total Value
Steer Calves	4.00	head	1	$ 235.00	$ 940.00
Steer Calves	5.00	head	1	$ 202.00	$ 1,010.00
Change in Value					$ 70.00
Feed Cost					
No Grain Ration- 0.80 adg, $1.17/day		days	125	$ 1.17	$ 146.25
Return over cost					**$ (76.25)**

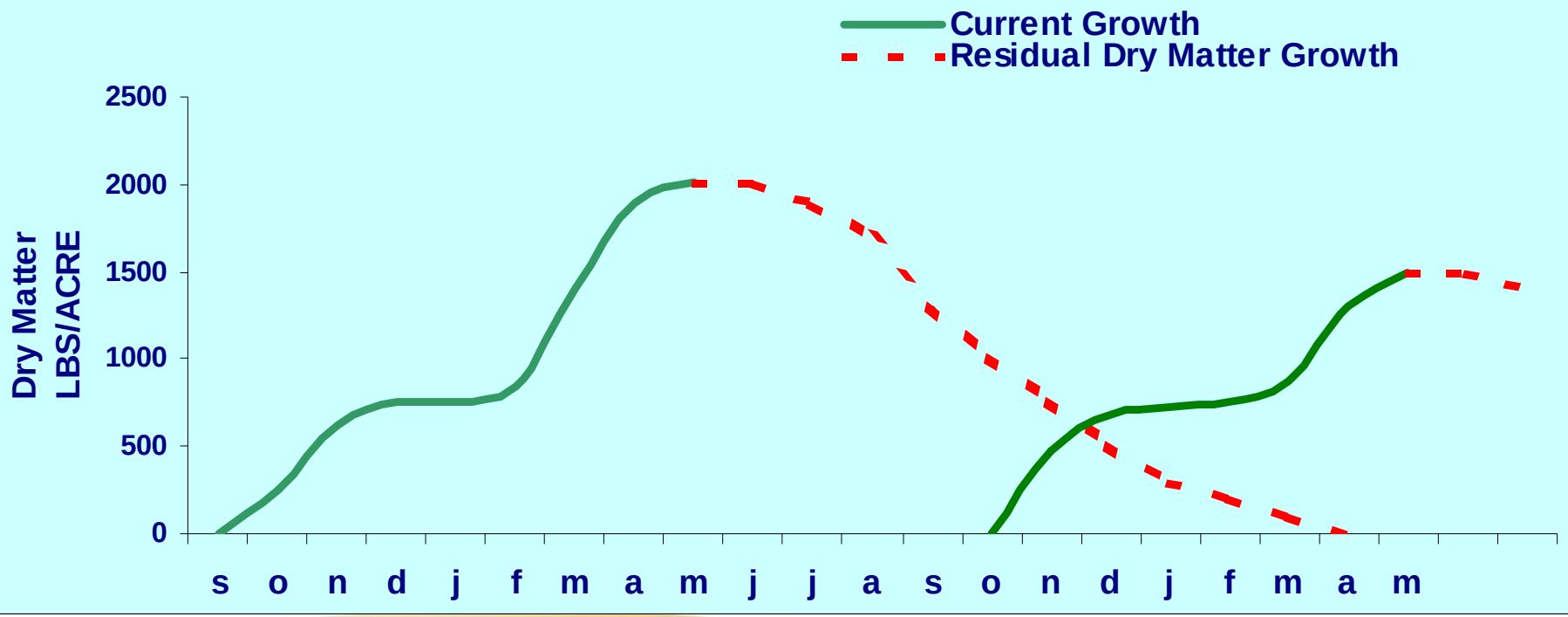
Looking at Maintaining Dry Cows

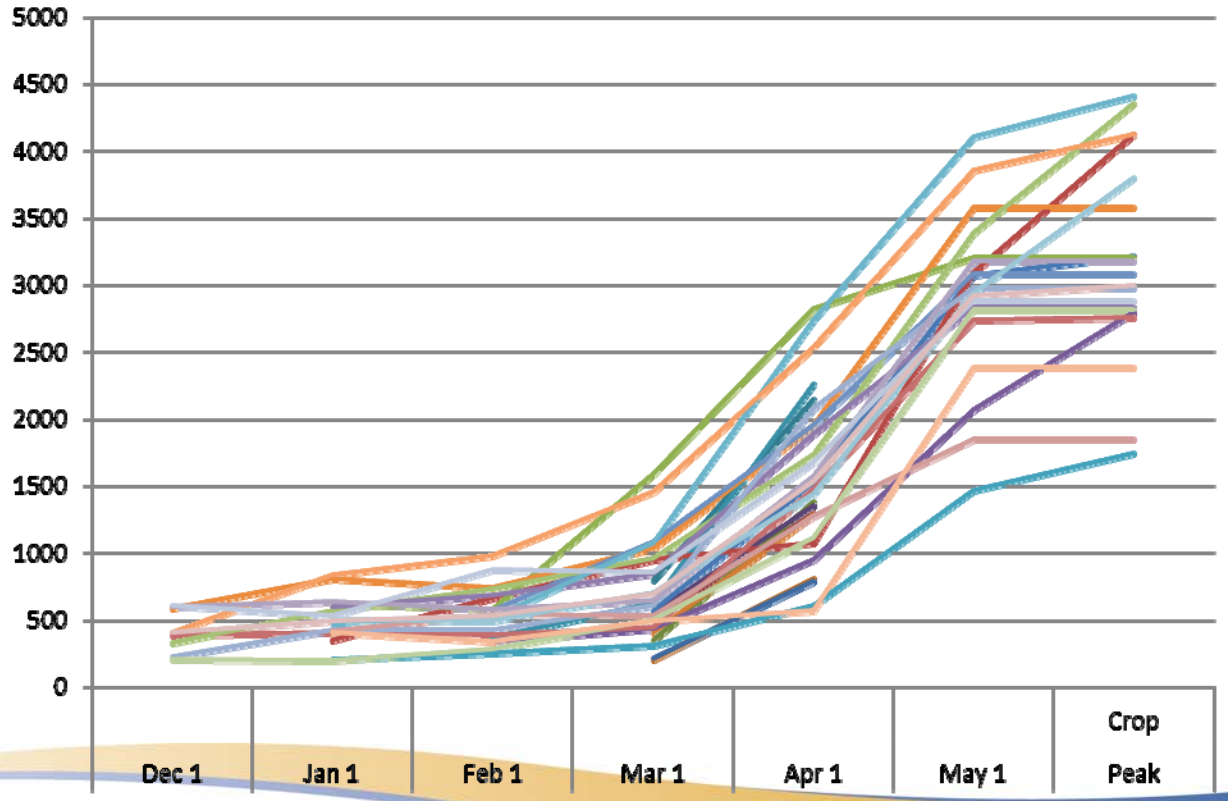
Feed Type	Size Cow	Days	Cost/Day	Cost/Period
Dry Cows-No Grain	1250	**30**	$ 2.56	$ 76.80
Dry Cows-Grain	1250	**30**	$ 1.27	$ 38.10

Feed Type	Size Cow	Days	Cost/Day	Cost/Period
Dry Cows-No Grain	1250	**60**	$ 2.56	$ 153.60
Dry Cows-Grain	1250	**60**	$ 1.27	$ 76.20

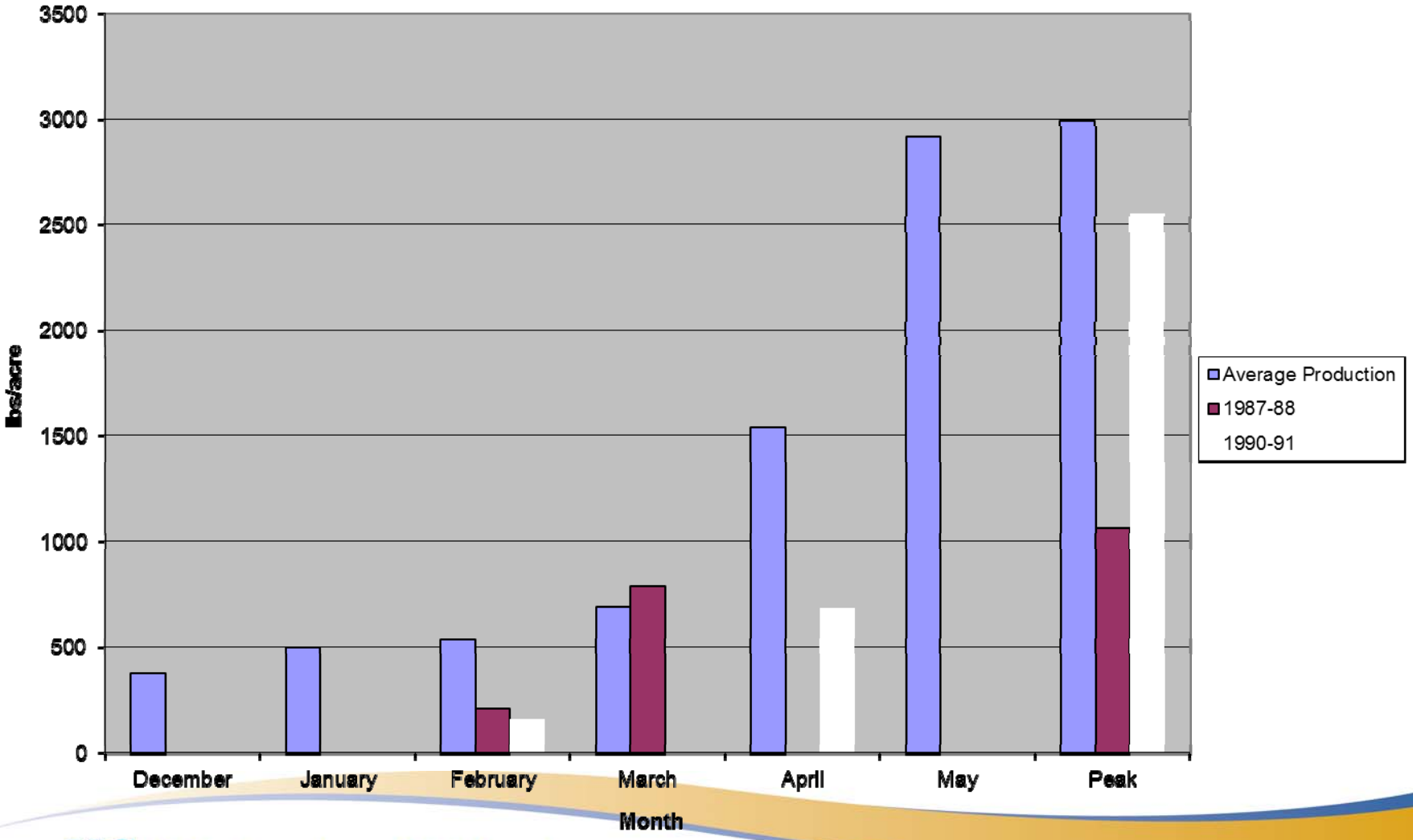
Typical Current Growth & Residue Decline

California Annual Grassland




5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Crop Peak

Average and 2008/2009 Season Monthly Annual Forage Production at the UC Sierra Field Station



Irrigation system

Final Thoughts-subject to change with the weather…

1. Irrigation water and summer pasture/range will likely be short
2. Think hard about weaning calves early-dry cows take less feed—can maybe hold on longer (until it rains)
3. Watch costs closely—make sure you understand the pros and cons of “weird feeds.”
4. Talk to your accountant before you get out of your cows