

# Maximizing Grower Profit in Tough Times

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Central Valley Region

**Profit = Income - Costs**

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# Net returns per acre above total costs to grow prunes\*

-----Yield/acre in dry tons-----

\$/dry ton	<b>2.8</b>	<b>3.2</b>	<b>3.6</b>	<b>4.0</b>	<b>4.4</b>	<b>4.8</b>	<b>5.2</b>
<b>1,050</b>	<b>-1,311</b>	<b>-1,116</b>	<b>-923</b>	<b>-730</b>	<b>-536</b>	<b>-343</b>	<b>-148</b>
<b>1,150</b>	<b>-1,031</b>	<b>-796</b>	<b>-563</b>	<b>-330</b>	<b>-96</b>	137	372
<b>1,250</b>	<b>-751</b>	<b>-476</b>	<b>-203</b>	70	344	617	892
<b>1,350</b>	<b>-471</b>	<b>-156</b>	157	470	784	1,097	1,412
<b>1,450</b>	<b>-191</b>	164	517	870	1,224	1,577	1,932
<b>1,550</b>	89	484	877	1,270	1,664	2,057	2,452
<b>1,650</b>	369	804	1,237	1,670	2,104	2,537	2,972

\*2008 Cost and Returns Study, UC Davis

# Net returns per acre increase with production increase of 0.8 dry t/acre

-----Yield/acre in dry tons-----

\$/dry ton	<b>2.8</b>		<b>3.6</b>				
1,050	<b>-1,311</b>	<b>→388→</b>	<b>-923</b>				
1,150	<b>-1,031</b>	<b>→468→</b>	<b>-563</b>				
1,250	<b>-751</b>	<b>→548→</b>	<b>-203</b>				
1,350	<b>-471</b>	<b>→628→</b>	157				
1,450	<b>-191</b>	<b>→708→</b>	517				
1,550	89	<b>→788→</b>	877				
1,650	369	<b>→868→</b>	1,237				

# Possible options to increase yield

- **Grow taller trees**
- **Interplant (if feasible)**
- **Don't prune (much)**



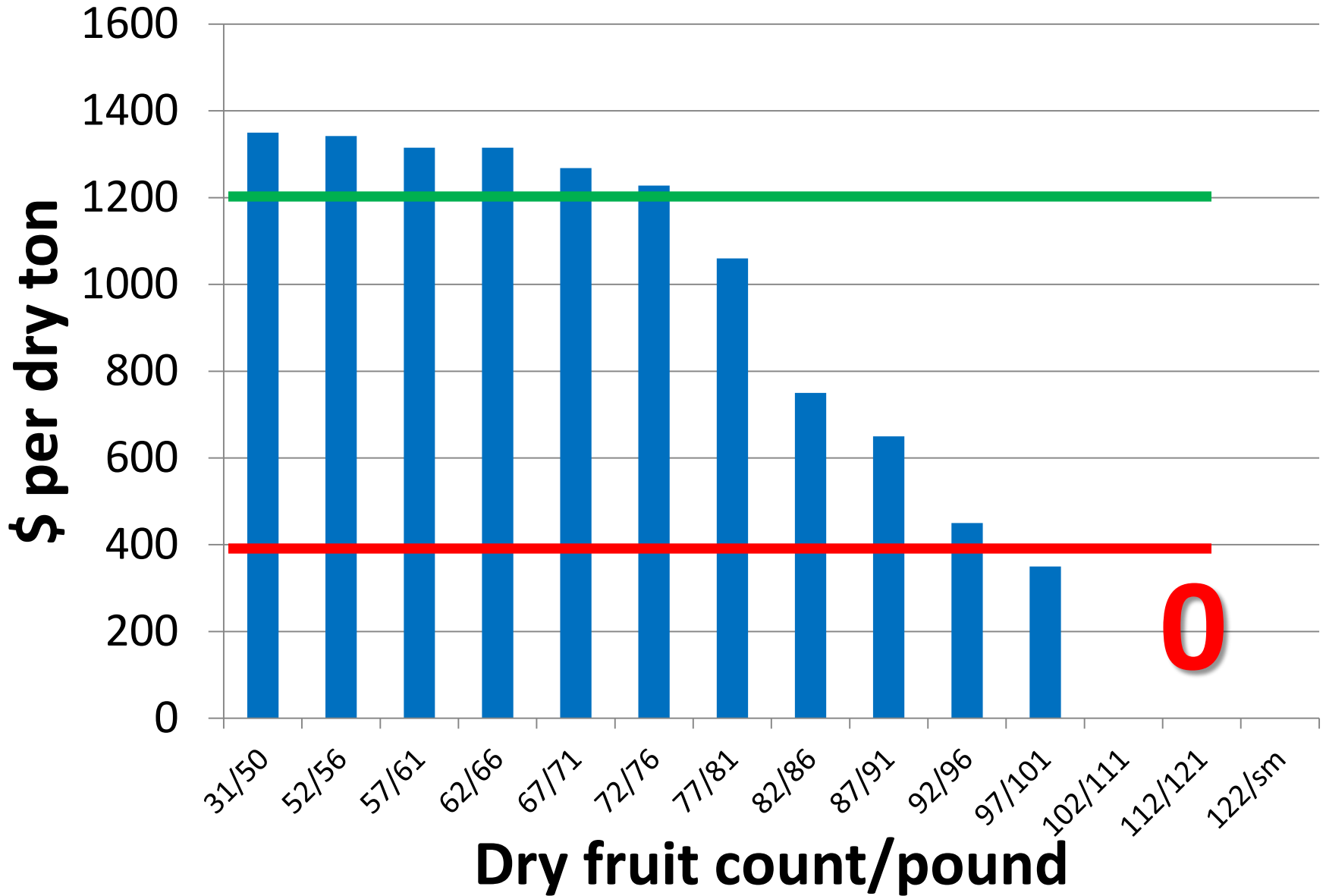
$20' \times 20' = 109 \text{ tree/acre}$   
 $20' \times 10' = 218 \text{ trees/acre}$

<b>Treatment</b>	<b>Green Yield (tons/acre)</b>	<b>Dry Yield (tons/acre)</b>	<b>Ave Count/lb</b>
Ladder n lopers	<b>9.1</b>	<b>3.1</b>	<b>43</b>
Dormant topping (14'- 15') + pneumatic pruning from the ground	<b>16.1</b>	<b>5.1</b>	<b>48</b>

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# PBA prices, 2009.



# Shaker thinning increases ave. size.



**Field sizing reduces costs by eliminating delivery of small fruit.**





**Profit = Income - Costs**

$$\text{Profit} = \text{Income} - \text{Costs}$$

<b>Production Practice</b>	<b>\$/acre cost</b>	<b>% of total</b>
Hand pruning	351	26.10
Bloom spray (2x)	155	11.52
irrigation (labor included)	151	11.23
300 # potassium sulfata (fertigated)	120	8.92
150 units N as UN32	113	8.40
Dormant weed spray	113	8.40
dormant spray (every other year)	42	3.12
Mowing row centers (5x)	42	3.12
ATV	41	3.05
mite spray (every other year)	38	2.83
Thin fruit (every other year)	33	2.45

<b>Production Practice</b>	<b>\$/acre cost</b>	<b>% of total</b>
Pickup	30	2.23
Rust spray	25	1.86
Scouting/consulting	25	1.86
Summer glyphosate strip spray	23	1.71
topping	15	1.12
Fall spray (every other year)	15	1.12
Hives	13	0.97
Fruit brown rot spray (1/5 years)	9	0.67
shred brush	9	0.67
gopher + squirrel baiting	7	0.52
Leaf sampling	2	0.15

\$1372

Pruning is the single most expensive preharvest practice.



Savings of 30-50% are possible with a combination of mechanical pruning + reduced hand work vs. ladders & loppers.





Proper irrigation is key to profitable  
prune growing.



# Fertilize as needed.

- Don't apply nitrogen or potassium fertilizer until crop has set and cropland evaluated.
- Look at cost of foliar-only or fertigation-only potassium applications
- Zinc sulfate in fall could be replaced by spring foliar zinc with less #/acre.

Every farm, every orchard is different  
and should be managed as such.



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**Thank you**

