

Costs to Establish and Produce Olives for Oil



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Super high density orchard



- San Joaquin Valley
- Over – the – row mechanical harvest
- Arbequina, Arbosana, or Koroneiki varieties
- 5' X 13' spacing, 670 trees per acre
- 80 contiguous acres
- Drip irrigation
- 25 year orchard life

Cost and Return Study Authors



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Costs of Production



- Cultural Costs
- Harvest Costs
- Cash Overhead
- Noncash Overhead

Costs of Production



- Cultural Costs
 - Pruning
 - Floor management
 - Disease and pest control
 - Irrigation and fertilization
 - ATV and pickup use
- Harvest Costs
- Cash Overhead
- Noncash Overhead

Costs of Production



- Cultural Costs
- Harvest Costs
 - Mechanical Harvest – Contract
 - Haul to Processor
- Cash Overhead
- Noncash Overhead

Costs of Production



- Cultural Costs
- Harvest Costs
- Cash Overhead
 - Liability Insurance
 - Sanitary Service
 - Property Taxes and Insurance
 - Repairs on Buildings and Irrigation System
- Noncash Overhead

Costs of Production



- Cultural Costs
- Harvest Costs
- Cash Overhead
- Noncash Overhead (Capital Recovery)
 - Buildings, Shop, and Field Tools
 - Irrigation System
 - Fuel Tanks
 - Equipment ownership
 - Trees

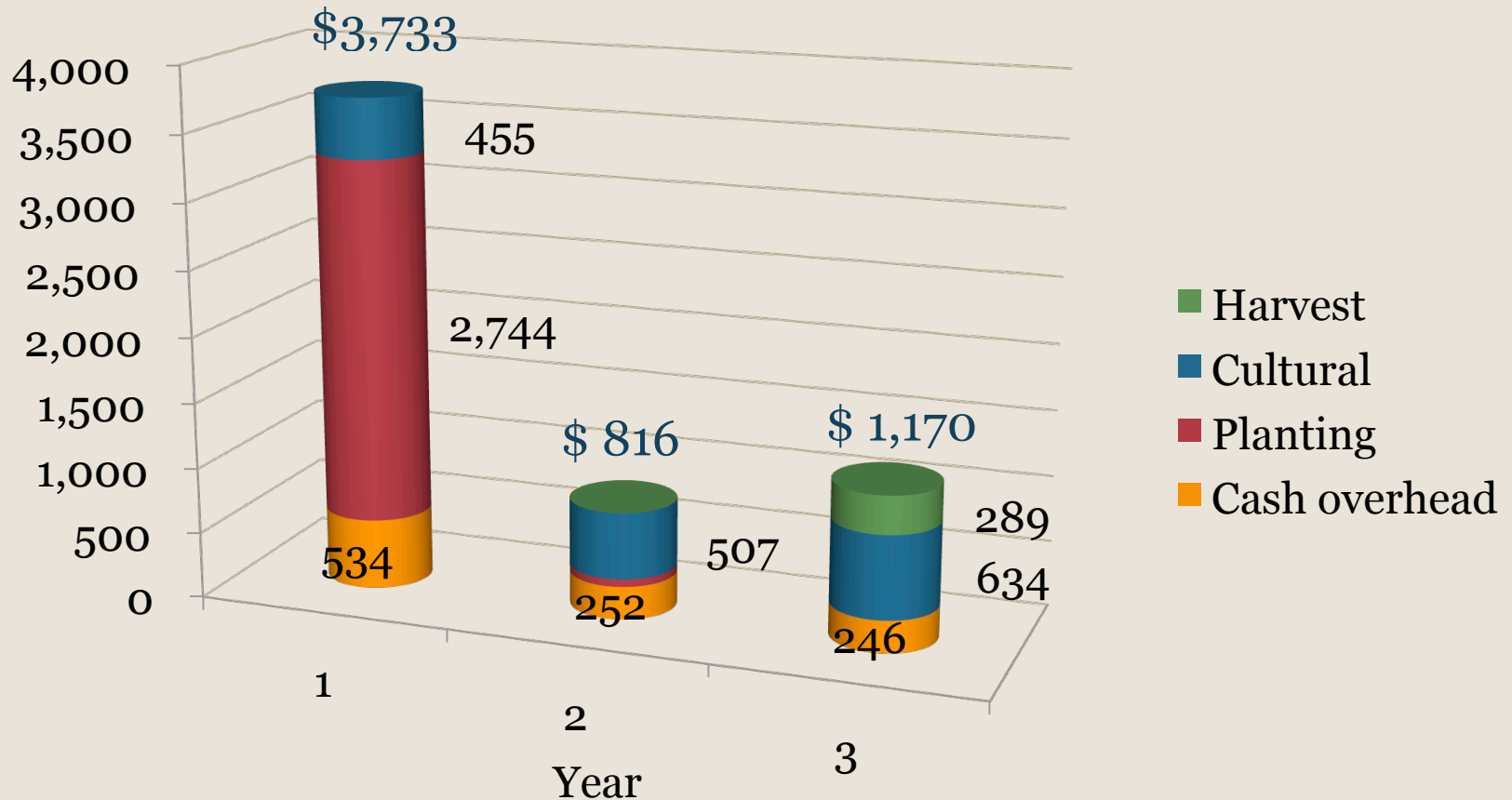
Equipment costs



- Cultural costs
 - Fuel and lube
 - Repairs
- Cash overhead
 - Insurance
 - Taxes
- Noncash Overhead (Capital recovery)
 - Principle and interest or ownership costs

Olives for Oil

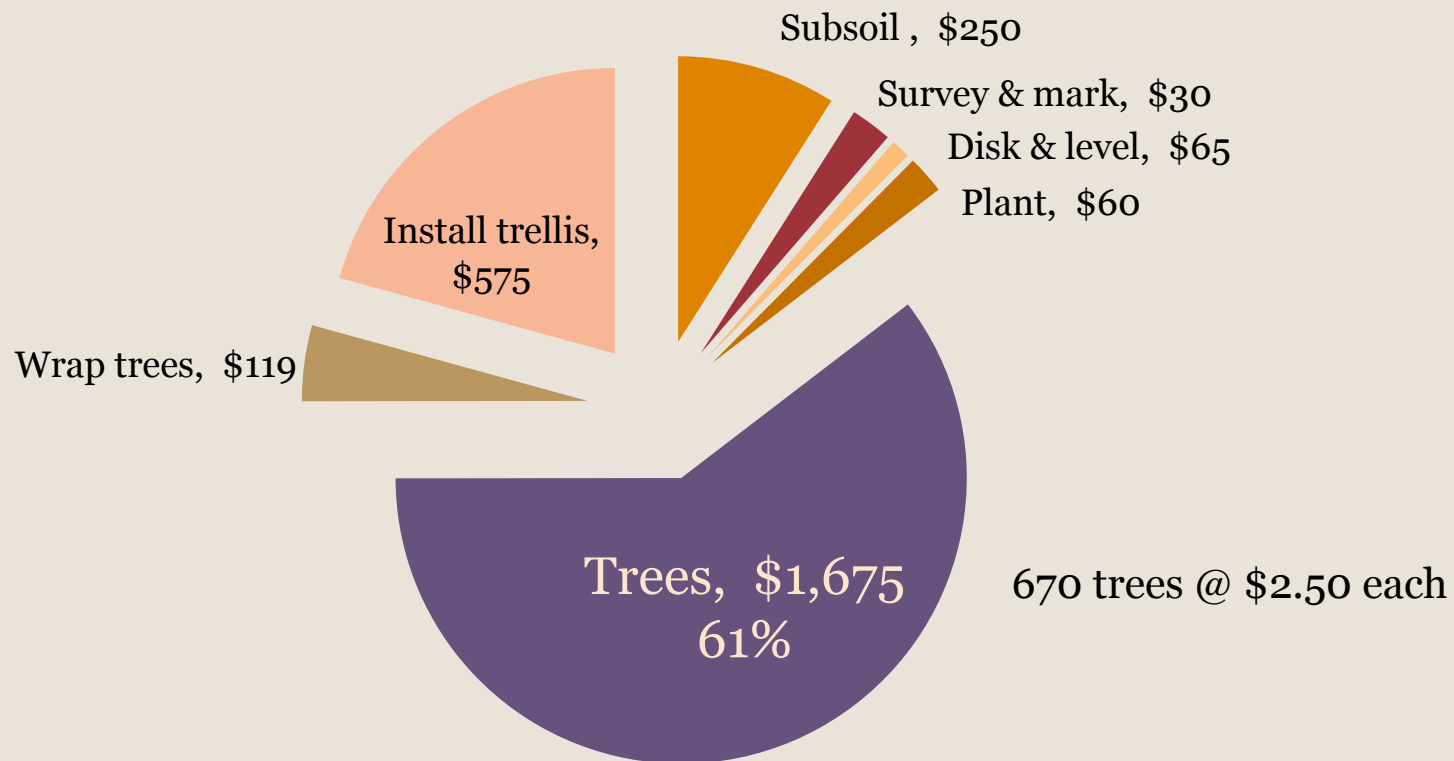
Cash costs of establishment (\$4,207/acre)*



*Does not include ownership costs for land, equipment, buildings or irrigation

Olives for Oil

Planting cost detail, \$2,744 per acre



Producing Olives for Oil

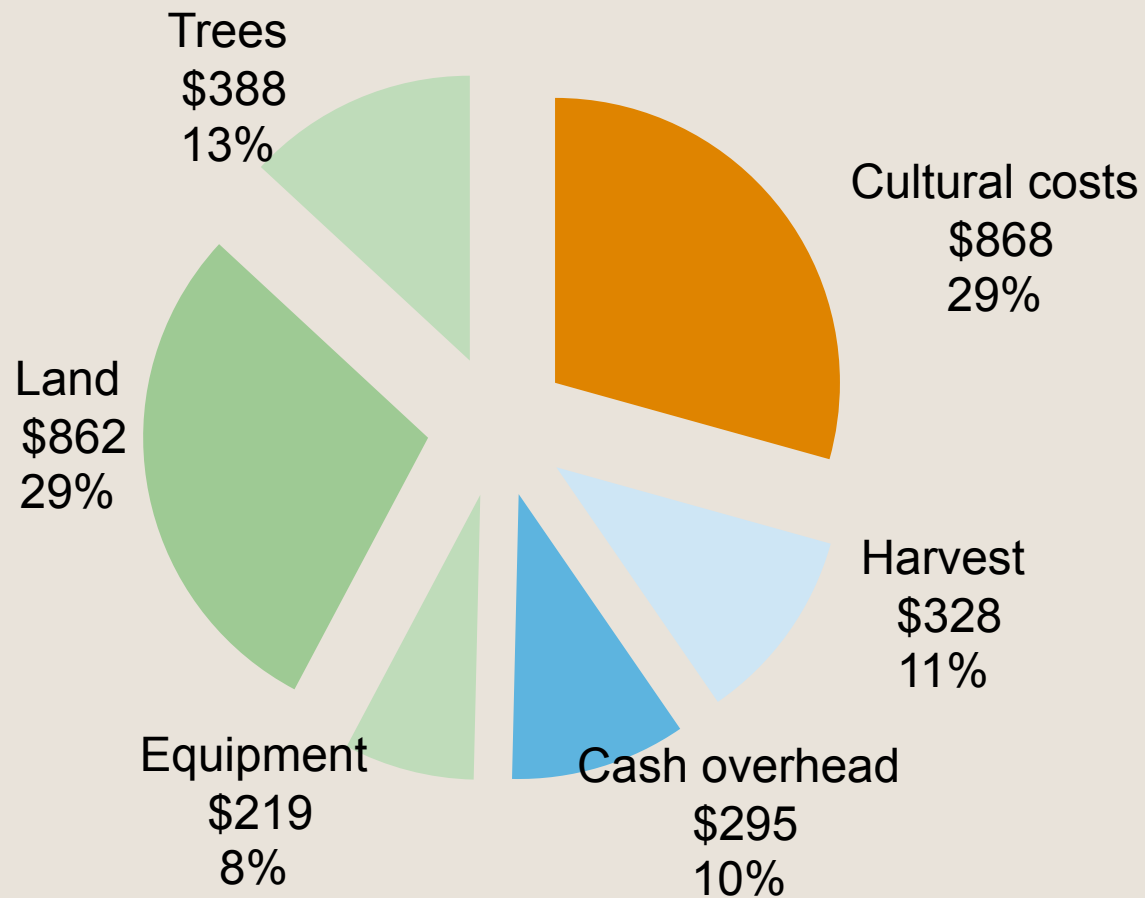
Calendar of operations



Operation	Month(s)
Strip spray weeds	March, June, Sept.
Prune trees	March, April
Irrigate and fertilize	March - October
Mow middles	April - June
Disease control	April and June
Insect control – fruit fly	June - October
Top prune trees	July
Skirt trees	August
October	Mechanical harvest

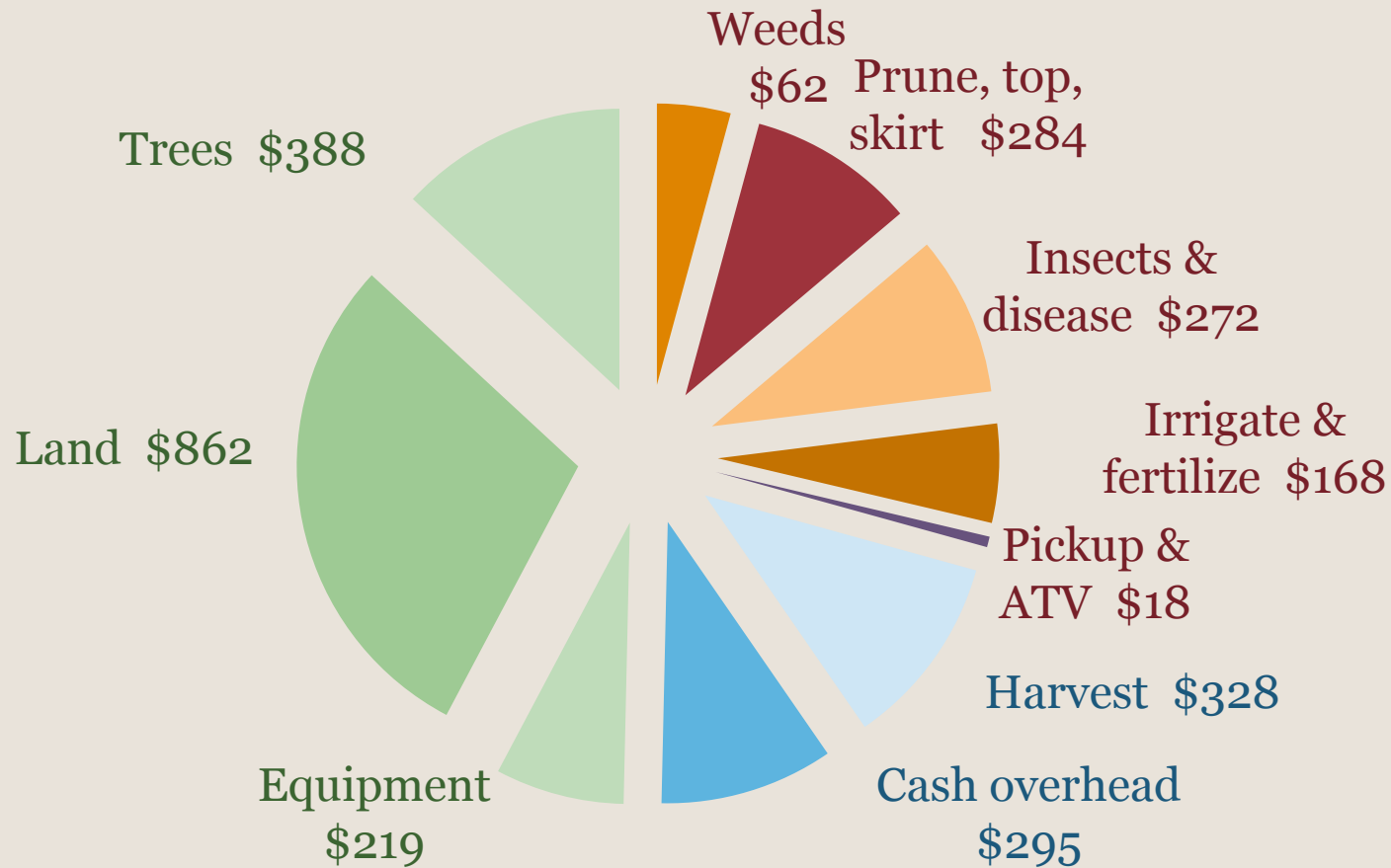
Olives for Oil

Total cost of production, \$2,960 per acre



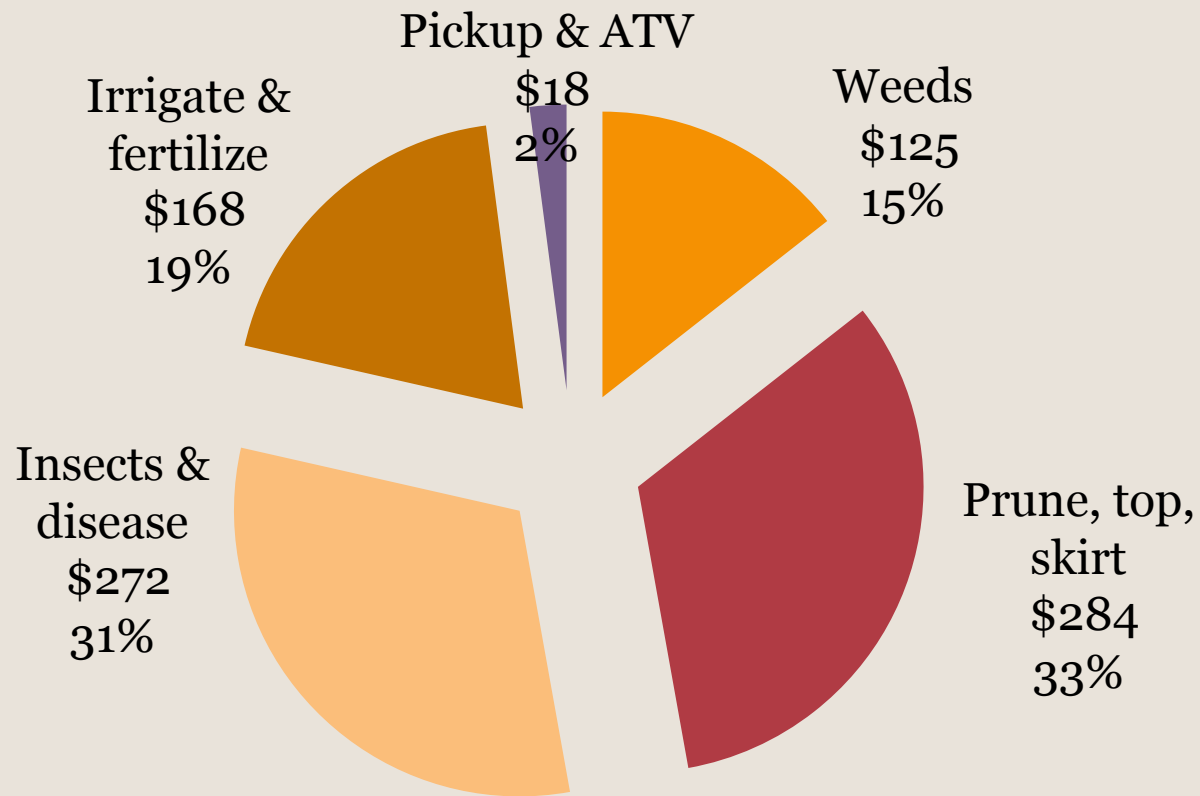
Olives for Oil

Total cost of production, \$2,960 per acre



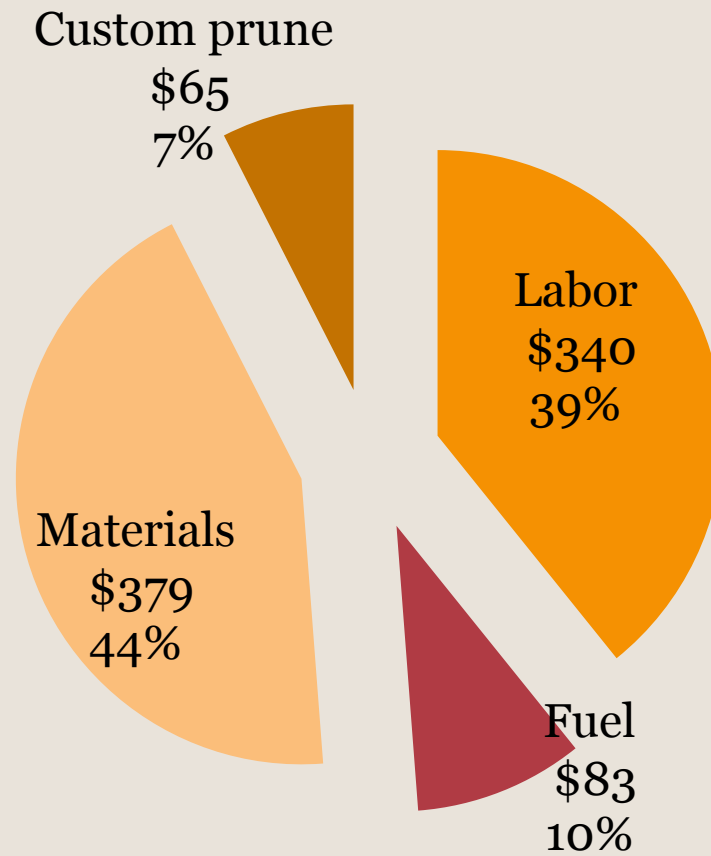
Olives for Oil

Cultural costs \$867 per acre



Olives for Oil

Cultural costs \$867 per acre



Olives for Oil

Prune, top, skirt



Operation	Months	Labor	Custom	Total
Prune	March April	219		219
Top prune	July		20	20
Skirt prune	August		45	45
Total		\$219	\$65	\$284

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Weed control detail



Operation	Labor	Materials	Fuel, lube, and repairs	Total
Strip spray 3X	\$10	\$22	\$8	\$41
Mow middles 4X	10		9	19
Strip spot spray	1	1	1	3
Dormant strip	3	57	3	63
Total	24	80	21	126

Operation	Month	Materials
Strip spray 3X	March, June, September	Roundup
Mow middles 4X	April - July	
Strip spot spray	June	Roundup
Dormant strip	October	Goal, Surflan

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Irrigation and fertilizer



Operation	Labor	Material	Fuel, lube, and repairs	Total
Irrigation	\$9	\$112		\$121
Fertilize - nitrogen	9	21		30
Fertilize -potassium	4	12		16
TOTAL	\$22	\$145		\$167

Operation	Month	Material
Irrigate	March - October	24 acre inches of water
Fertilize through drip	March - October	UN- 32, 45 pounds Potassium sulfate, 74 pounds

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Insects and disease

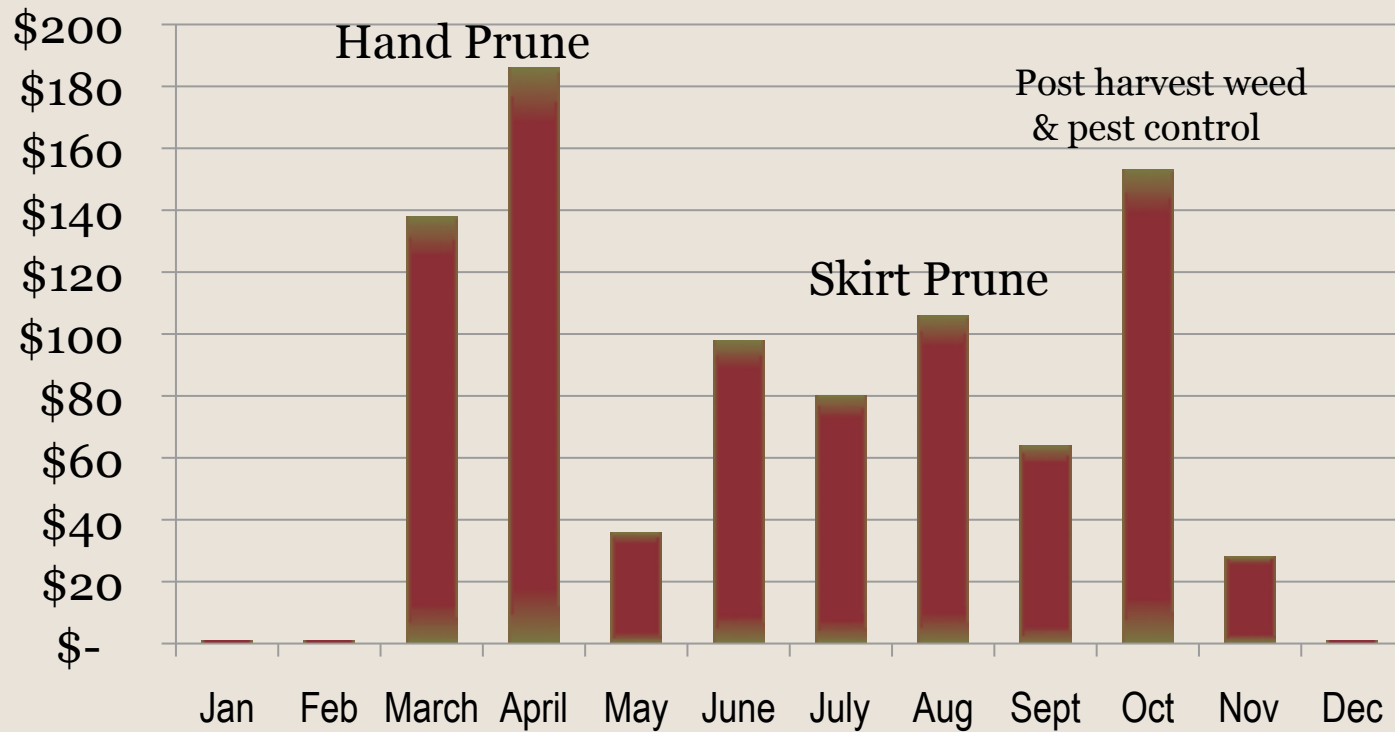


Operation	Labor	Material	Fuel, lube, and repairs	Total
Olive knot and peacock spray 2X	14	72	12	98
Black scale (10%)	7	1	6	14
Olive fruit fly 6X	41	80	38	159
TOTAL	62	153	56	271

Operation	Month	Materials
Olive knot and peacock spray 2X	April, October	Kocide
Black scale (10%)	June	Narrow spectrum oil
Olive fruit fly 6X	June – October	GF 120

Olives for Oil

Monthly cultural costs

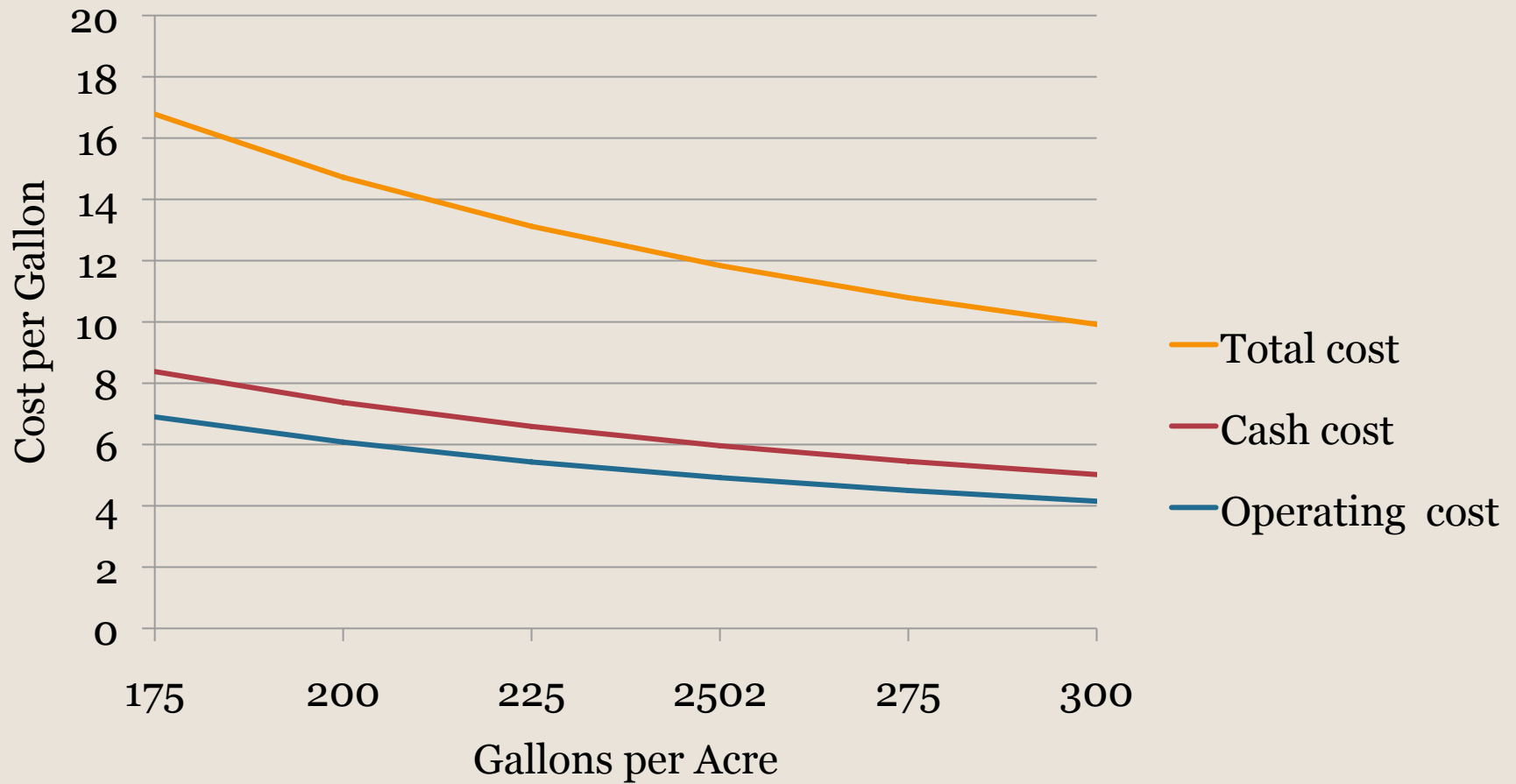


Expected yields and prices

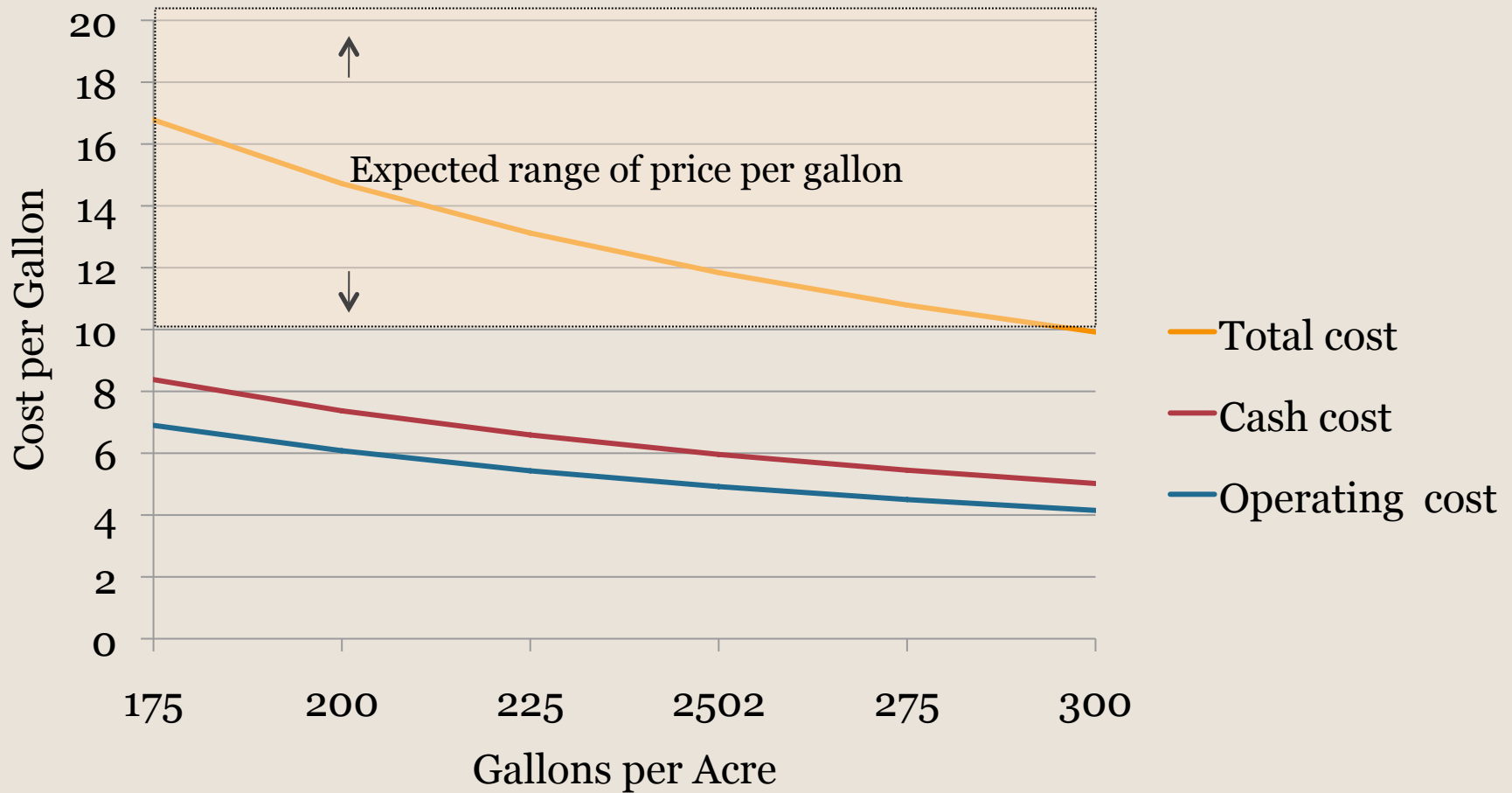


- Marketable production begins in the 3rd year
 - Year 3, 84 gallons per acre (2 tons fresh fruit)
 - Year 4, 189 gallons per acre (4.5 tons fresh fruit)
 - Year 5 and after, 250 gallons per acre (6 tons fresh fruit)
- Expected yield range: 175 – 300 gallons per acre
- Expected price range: \$10 – \$20 per gallon

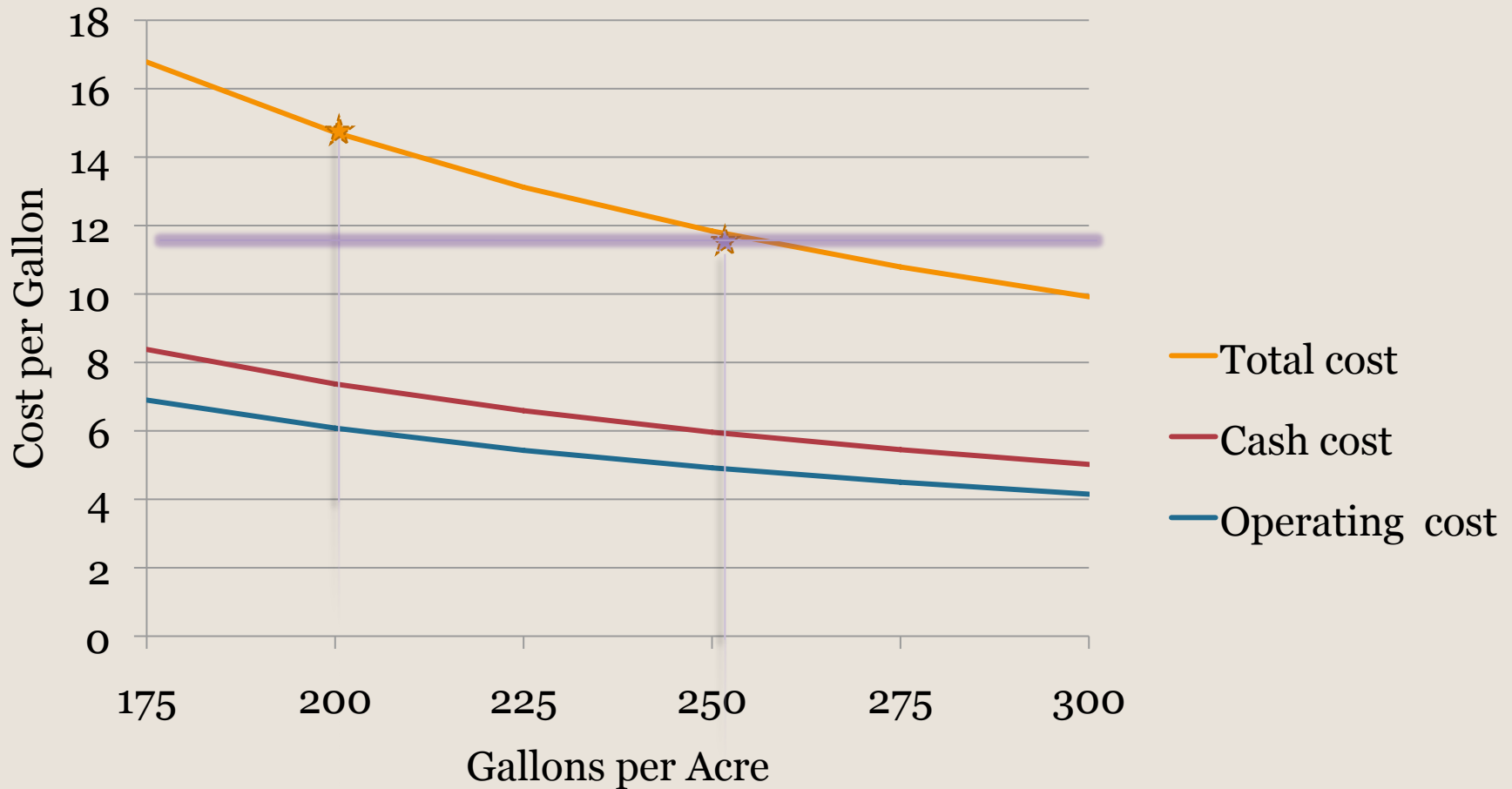
Costs per gallon at varying yields



Costs per gallon at varying yields



Breakeven Price is \$14.70 at 200 gallons and
\$11.84 at 250 gallons/acre



Cost per Gallon Excluding & Including Land



Costs / gallon	200 gallons/acre	250 gallons/acre
Cash costs	\$7.37	\$5.96
Equipment costs	1.08	.88
Tree establishment	1.94	1.55
TOTAL EXCLUDING LAND	10.39	8.39
Land (annual interest payment)	4.31	3.45
TOTAL INCLUDING LAND	14.70	11.84

Net Returns **per Acre** Excluding Land Costs



\$ / Acre	200 gallons/acre	250 gallons/acre
REVENUE @ \$12 /gallon	\$2,400	\$3,000
REVENUE @ \$18 / gallon	3,600	4,500
COST EXCLUDING LAND	2,082	2,098
NET RETURNS @ \$ 12 /gallon	318	892
NET RETURNS @ \$ 18 /gallon	1,518	2,402

Net Returns **per Acre** above Costs



Including Land Costs

\$/gallon	200 gallons/acre	250 gallons/acre
12	-544	56
15	56	790
18	656	1,540

Excluding Land Costs

\$/gallon	200 gallons/acre	250 gallons/acre
12	318	918
15	918	1,652
18	1,518	2,402

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