NewYork
APPLE SALES, INC.

Planning Orchard Investments in a Rapidly Changing Market Place

Matt Wells

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Orchard Investments and Changing Market Place

New York
APPLE SALES, INC.

Orchard Investment Timeline

Nursery Order (0)

Plant Orchard (3)

First "Bearing" Crop (5)

Payback Range (9–15)

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

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Changing Market Place

- Retailers
- Consumer Demographics
- Produce Category
- Apple Industry

As individual growers, you can't……….?

My Goal Today

To give you a methodology for making your orchard investment decisions

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Investing in the Stock Market

What steps would you take to invest money in the stock market or other investment options?

Major Steps:

- Establish objectives, goals
- Meet with an advisor
- Conduct research
- Review current portfolio
- Conduct analysis
- Make your investment

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Establish Objectives/Goals

<u>Baseline Information:</u>

- Balance sheet – equity ratio, cash
- Current portfolio - variety mix, bearing/non-bearing
- Forecasted cash flow

<u>Objectives/Goals Questions:</u>

- Risk tolerance
- Short-term vs. Long-term view
- What are you trying to achieve?

Advisors and Research

<u>Advisors:</u>

- Banker
- Sales/marketing
- Field staff

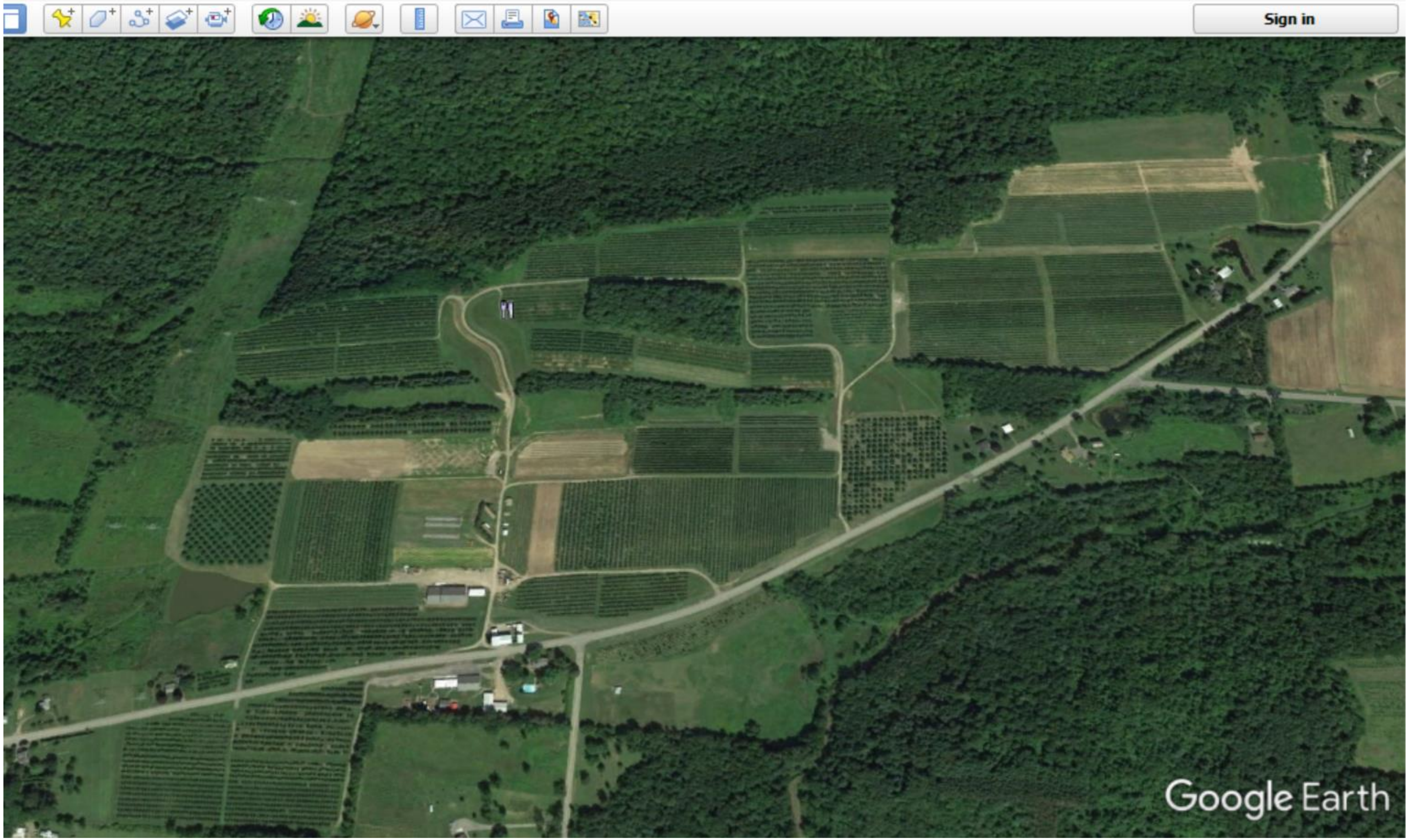
<u>Research:</u>

- Production trends
- Planting trends
- Return trends
- Travel
- Retail/consumer data

Review Current Portfolio

<u>What to Review:</u>

- List of investments (orchards/blocks)
  - ➢ Variety, Strain
  - ➢ Rootstock
  - ➢ Age
  - ➢ Yields
  - ➢ Gross Returns


Sign in
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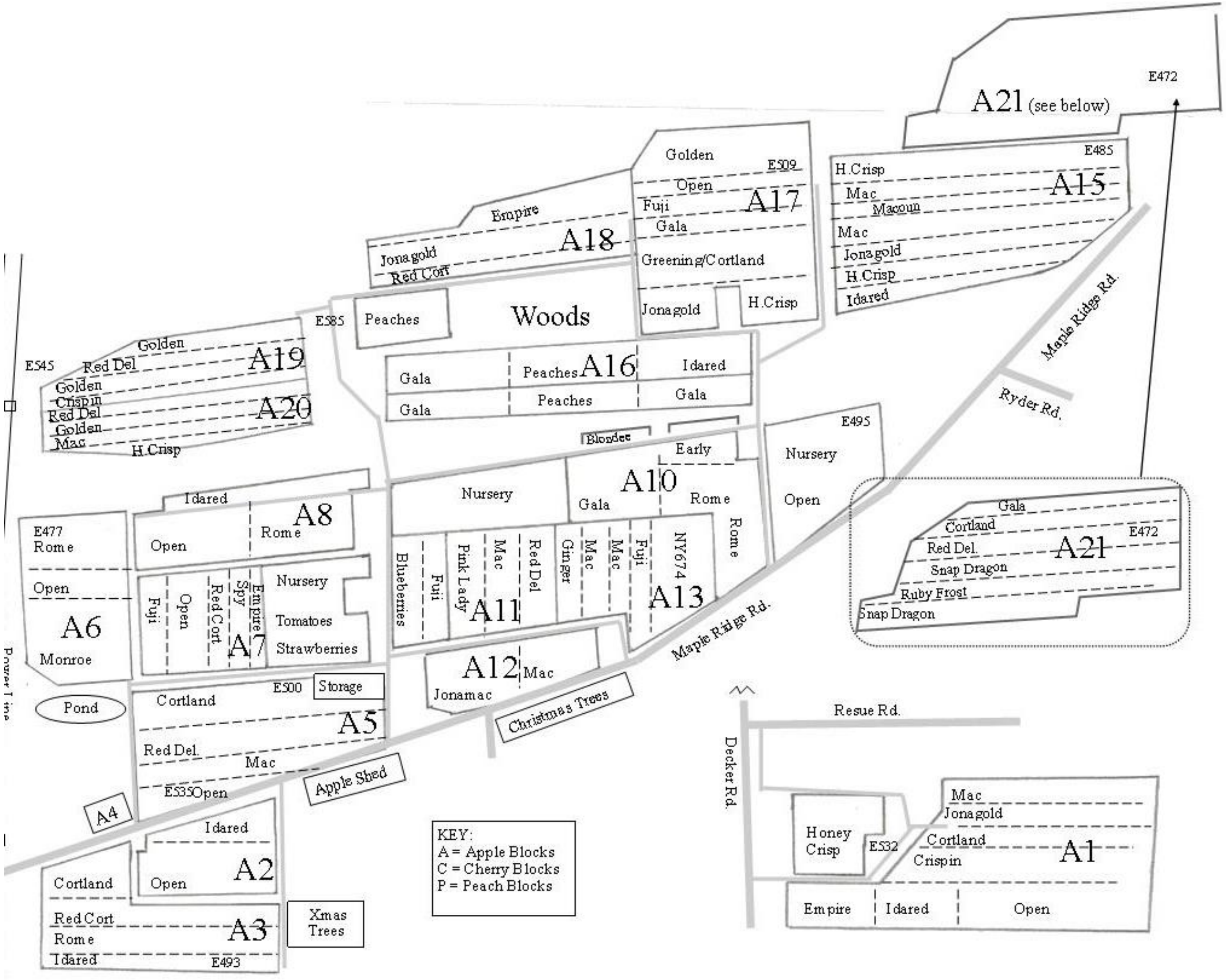
- 74 Apple Investments
- From 1958-2019
- 28 Varieties
- 4 Orchard Systems:
  - Free Standing – LD
  - Free Standing – MD
  - Vertical Axe
  - Tall Spindle
- 13 Rootstocks
- Grown For:
  - Retail Farm Mkt.
  - Processing (sauce/slice)
  - Fresh Wholesale



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Review Portfolio (hypothetical orchard)

Block	Variety	Strain	Acres	Tree	Row	Density	Root	Age	Avg. Yield	Gross/Ac.	Bearing?	F/P
1	McIntosh	Roger	15.0	12	20	182	M26	25	1,400	$ 7,000	Mature	Process
1	Idared		12.0	12	20	182	M111	25	1,500	$ 8,250	Mature	Process
1	Rome		12.0	10	20		M111	25	1,400	$ 7,350	Mature	Process
2	Gala	Fulford	13.0	10	18	242	M26	15	1,100	$ 9,900	Mature	Fresh
2	Empire	Royal	10.0	10	18	242	M26	15	1,000	$ 7,000	Mature	Process
3	Gala	Brookfield	6.0	6	14	519	M9	7	1,000	$ 11,250	Mature	Fresh
3	McIntosh	Linda	7.0	6	14	519	M9	7	1,200	$ 7,800	Mature	Fresh
3	Honeycrisp		4.0	6	14	519	M9	7	900	$ 22,500	Mature	Fresh
4	Gala	Brookfield	3.0	2	11	1,980	M9	3	300	$ 3,750	Young Bearing	Fresh
4	Honeycrisp		5.0	2	11	1,980	M9	3	250	$ 6,250	Young Bearing	Fresh
4	Fuji	Aztec	3.0	2	11	1,980	B9	3	300	$ 4,500	Young Bearing	Fresh
5	Fuji	Aztec	3.0	2	11	1,980	G41	1	-	$ -	NonBearing	Fresh
5	Gala	Buckeye	3.0	2	11	1,980	B9	1	-	$ -	NonBearing	Fresh
5	SnapDragon		4.0	2	11	1,980	G41	1	-	$ -	NonBearing	Fresh

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Analyze Data (hypothetical orchard)

Block	Variety	Strain	Acres	Tree	Row	Density	Root	Age	Avg. Yield	Gross/Ac.	Bearing?	F/P
3	Honeycrisp		4.0	6	14	519	M9	7	900	$ 22,500	Mature	Fresh
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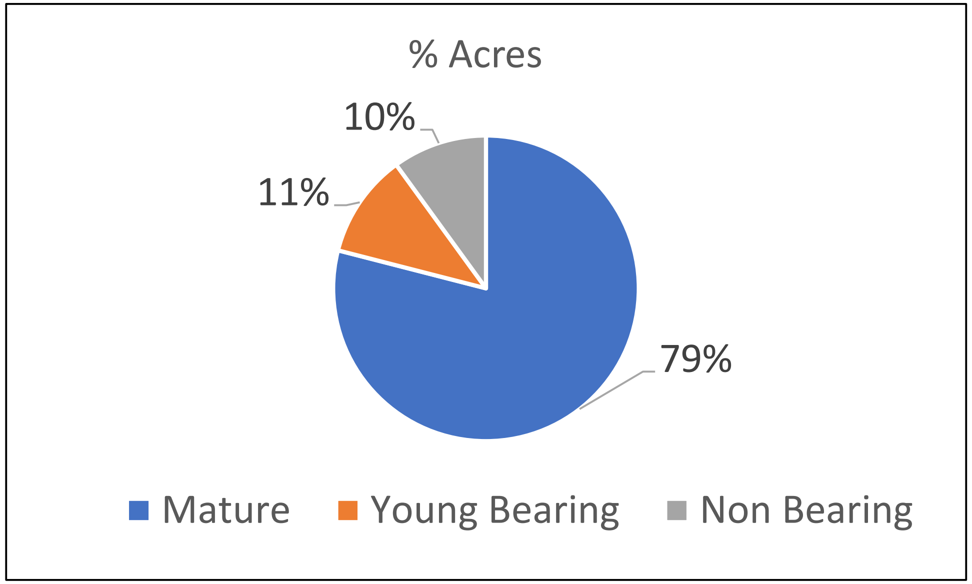
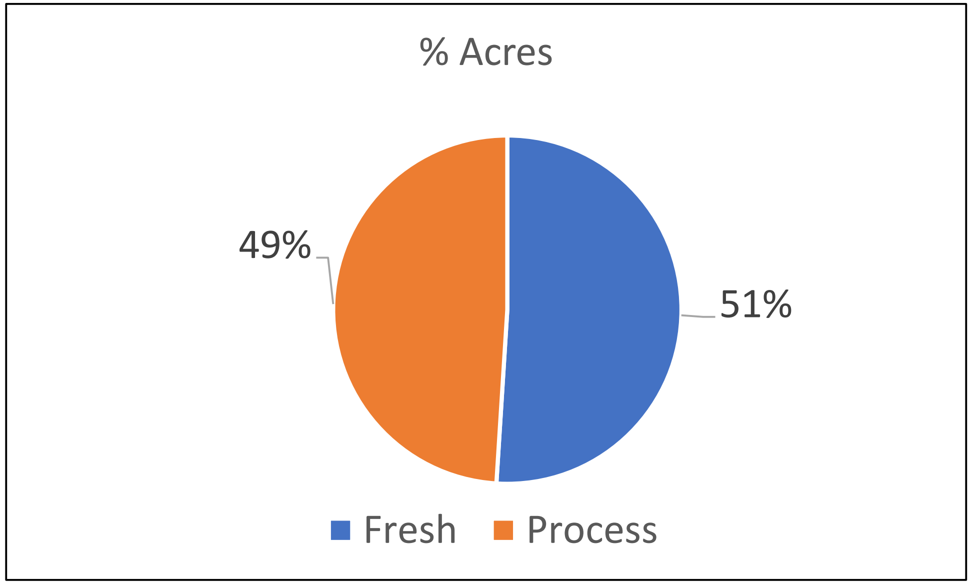
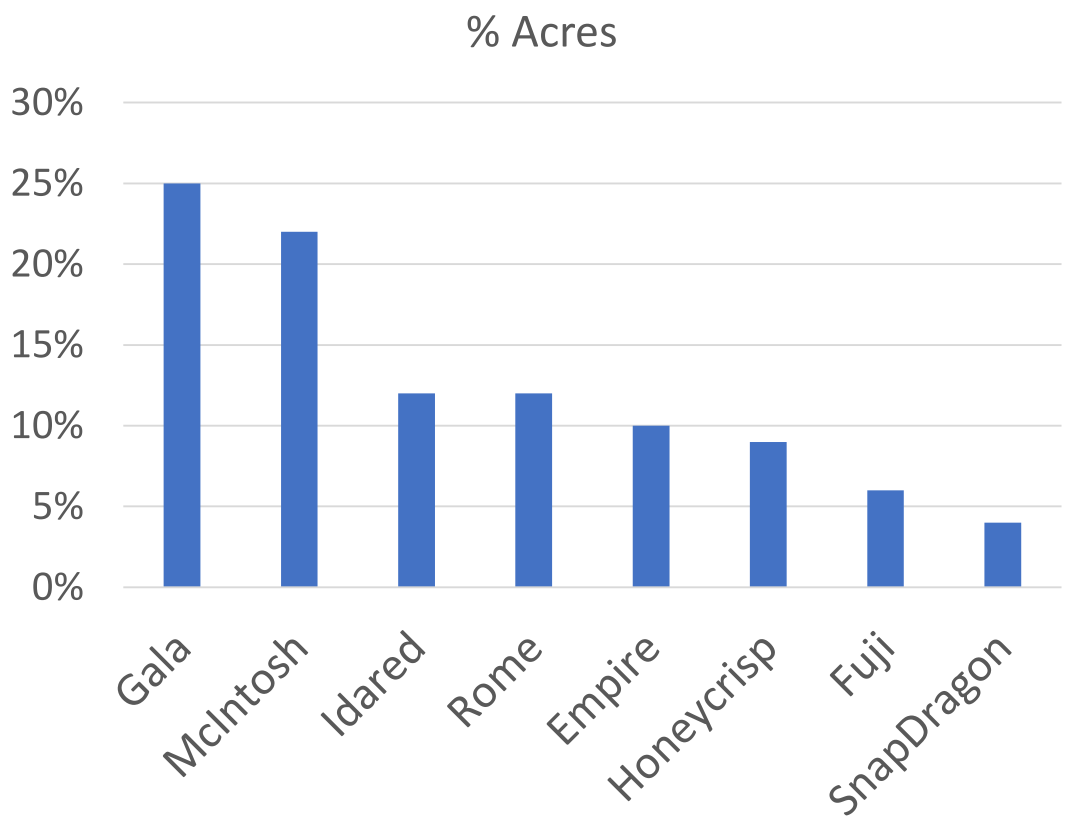
Analyze Data







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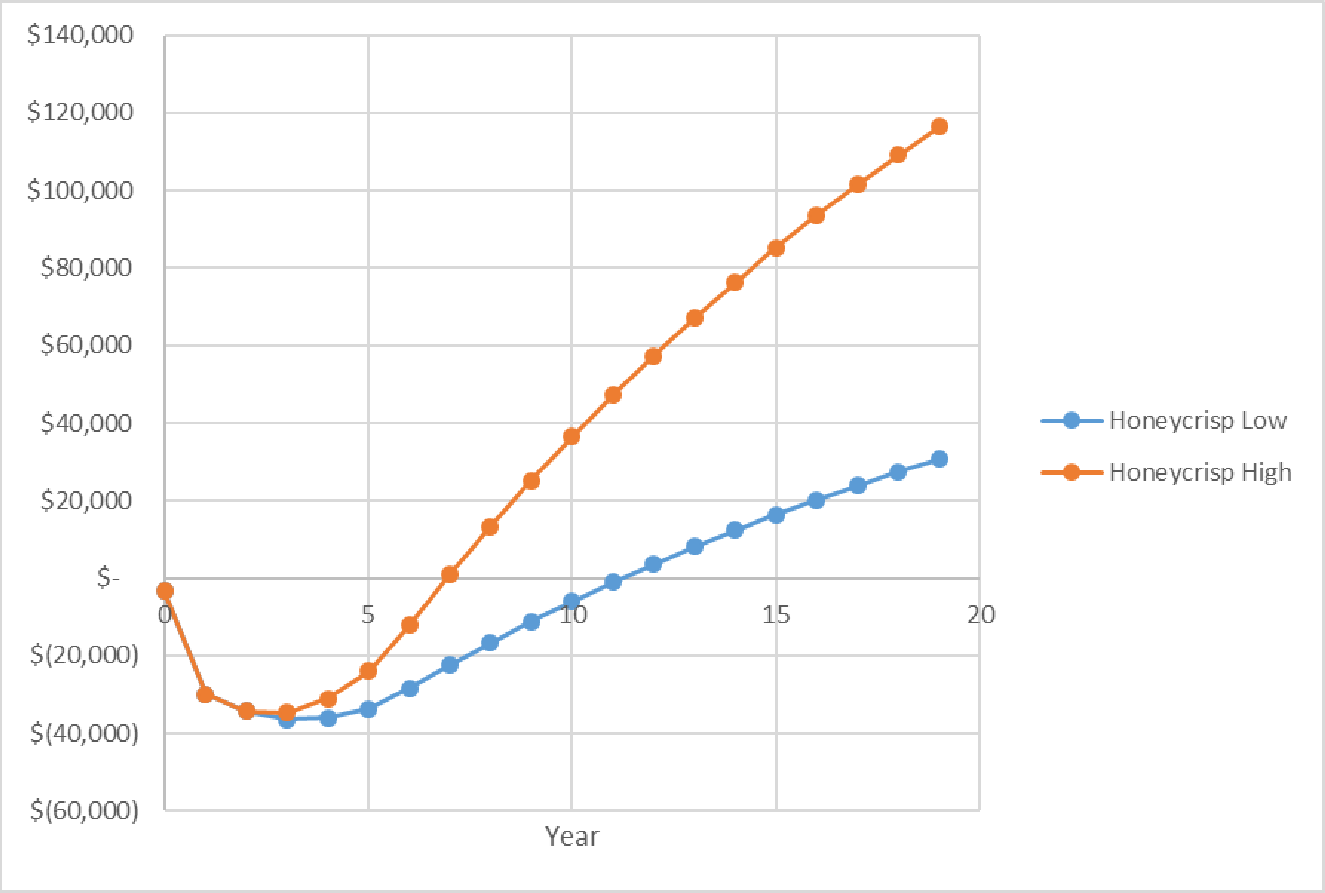
Payback Analysis



- Conduct payback analysis:
  - ➢ Spreadsheet tool on the LOF website under “business” named “Apple System Payback Calculator”
- Know your costs of production:
  - ➢ LOF recently released Farm Business Summary

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Renewal Rate

Important Analysis!

<u>Two Main Factors:</u>

1. Land constrained or have open ground

2. Financial status and future cash flow

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Create A Plan

Goals:

- 30% Process, 70% Fresh
- 5% Renewal rate
- Improve quality/pack-outs

Market	Current	Target
Process	49%	30%
Fresh	51%	70%
Fresh	**Current**	**Target**
Gala, HC, Fuji	40%	50%
Clubs/New	4%	10%
Other (Macs)	7%	10%

Year	Plant	Acres	Remove	Acres
2021	Honeycrisp	5	McIntosh	5
2022	Pink Lady	5	McIntosh	5
2023	Fuji	5	Empire	5
2024	Gala	5	Empire	5
2025	Rome	5	Empire	5
2026	Idared	5	McIntosh	5
2027	Fresh	5	Gala	5
2028	Fresh	5	Gala	5
2029	Process	5	McIntosh	5
2030	Fresh	5	Rome	5

My Goal Today

To give you a methodology for making your orchard investment decisions

#1 Question?

What to Plant?!!

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Variety Rank by FOB (2018/19)

VARIETY		
HONEYCRISP	$50-60	***Money Makers***
SWEETANGO		
EVER CRISP	$30-40	***Wannabees***
SNAPDRAGON		
RUBYFROST		
KORU		
FUJI	$25-30	***Bread and Butter***
PINK LADY		
GALA		
GOLDENs	$20-25	***Traditionals***
MCINTOSH		
MACOUN		
CORTLAND		
RED DELICIOUS	$20 and lower	***On the Out***
GINGERGOLD		
ACEY MAC		
EMPIRE		
JONAGOLD		

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New York Apple Sales, Inc.

FOB Impact on Gross

Average FOB ($/box)

Yield: Bins per Acre

	$ 10	$ 15	$ 20	$ 25	$ 30	$ 35	$ 40	$ 45	$ 50
20	$ (80)	$ 1,400	$ 2,880	$ 4,340	$ 5,820	$ 7,280	$ 8,760	$ 10,240	$ 11,700
30	$ (120)	$ 2,100	$ 4,320	$ 6,510	$ 8,730	$ 10,920	$ 13,140	$ 15,360	$ 17,550
40	$ (160)	$ 2,800	$ 5,760	$ 8,680	$ 11,640	$ 14,560	$ 17,520	$ 20,480	$ 23,400
50	$ (200)	$ 3,500	$ 7,200	$ 10,850	$ 14,550	$ 18,200	$ 21,900	$ 25,600	$ 29,250
60	$ (240)	$ 4,200	$ 8,640	$ 13,020	$ 17,460	$ 21,840	$ 26,280	$ 30,720	$ 35,100
70	$ (280)	$ 4,900	$ 10,080	$ 15,190	$ 20,370	$ 25,480	$ 30,660	$ 35,840	$ 40,950
80	$ (320)	$ 5,600	$ 11,520	$ 17,360	$ 23,280	$ 29,120	$ 35,040	$ 40,960	$ 46,800
90	$ (360)	$ 6,300	$ 12,960	$ 19,530	$ 26,190	$ 32,760	$ 39,420	$ 46,080	$ 52,650
100	$ (400)	$ 7,000	$ 14,400	$ 21,700	$ 29,100	$ 36,400	$ 43,800	$ 51,200	$ 58,500

Gross $/Acre

Operating Cost + Capex + Debt Service + Owner Pay = $9,000

Assumptions: 80% pack-out, tray/poly pack charges, storage, MCP, commission

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Mix Matters….A Lot

Mix Scenarios	A	B	C	D	E
On the Out	45%	40%	35%	25%	0%
Traditionals	35%	35%	25%	20%	20%
Bread Butter	20%	20%	25%	30%	55%
Wannabees	0%	0%	5%	10%	10%
Money Makers	0%	5%	10%	15%	15%
Avg. FOB	$ 19.88	$ 21.75	$ 24.63	$ 27.63	$ 29.50
Gross/Acre	$ 7,108	$ 8,488	$ 10,605	$ 12,815	$ 14,203
Net Less $6,700	$ 408	$ 1,788	$ 3,905	$ 6,115	$ 7,503
Net Less $8,950	$ (1,843)	$ (463)	$ 1,655	$ 3,865	$ 5,253

Assumptions: 50 bins/acre, 80% pack-out, tray/poly pack charges, storage, MCP, commission

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Clubs/New Varieties

- Nielsen 57 listed varieties
- Retailer fatigue
- Retail SKU rationalization
- What do consumers think or want?
- Investment and marketing costs

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Planting Systems

- Combination of a high density system and a high returning variety will pay back the soonest.
- High density systems generally produce higher quality fruit

Summary

1. Be methodical with approach to investing
2. Build a portfolio that aligns with objectives
3. Do the math
4. Make decisions with all stakeholders
5. Conduct review/analysis one time per year