Hard Cider: Does the emerging industry offer profitable new opportunities for apple growers?

Presentation for the Iowa Fruit and Vegetable Growers Conference

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What’s on tap for this presentation?

1. Brief history of the cider industry
2. Current cider industry trends
3. Intro to cider styles
4. The economics of cider
5. Opportunities for growers
Some often quoted cider history:

John Adams drank a tankard of cider every day, saying of his habit, “It seems to do me good.”

Thomas Jefferson devoted much of his orchard at Monticello to cider apples, calling his Taliaferro cultivar “the best cider apple existing.”

Characters like Johnny Appleseed brought apples (and cider) westward

William Henry Harrison got elected on the “log cabin and hard cider” platform.
Key Factors in the Fall of Cider

- The Temperance Movement
- The decline of the self-sustaining farm
- Increased availability of other safe beverages
- German immigrants producing beer
- Industrialization and urbanization economically favoring beer production
- Prohibition putting the nails in the coffin, and even after prohibition, home cider-making remaining illegal for decades
A Cider Renaissance?

- A five year annual growth rate of 50.6%

Cider Revenue 2005 - 2014
(in millions of dollars)

- Projected 13.9% growth through 2019

Source of data: www.ibisworld.com
Who’s Buying Cider?

- A young market (nearly half under age 35)
- Approximately 50:50 split between men and women

Major market segmentation (2014)

- 24% Consumers aged 21 to 24
- 22% Consumers aged 25 to 34
- 20% Consumers aged 35 to 44
- 16% Consumers aged 45 to 54
- 13% Consumers aged 55 to 64
- 5% Consumers aged 64 and older

Total $292.5m

SOURCE: WWW.IBISWORLD.COM
A Sobering Note

• The cider industry is dominated by a small number of major players who often purchase juice concentrate from major apple growing areas and foreign markets to make their products (meaning limited benefit for Midwest apple growers).

Notes: MillerCoors owns Crispin and Smith and Forge; Anheuser-Busch InBev owns Stella Cidre, Johnny Appleseed Cider, and Michelob Ultra Cider; C&C Group owns Woodchuck; and Boston Beer Company owns Angry Orchard.
The Bigger Opportunity for US Growers: Craft and Artisanal Cider

- Local and regional craft cideries are sprouting up all across the country
- Some of the bigger companies are developing more artisanal brands and products that feature locally and regionally grown apples
- Of 105 respondents in a 2014 survey of cider makers, all of them projected increased cider production in the coming year*

*Source: Miles, Carol and Greg Peck. 2013 and 2014 CiderCon Survey Results of Cider Producers and Cider Apple Growers
Cider Makers in the Midwest

Michigan = 56
Wisconsin = 16
Minnesota = 14
Ohio = 11
Indiana = 10
Illinois = 6
Missouri = 6
Iowa = 4

Source: Cydermarket.com
More Reasons to be Excited about “Craft” Cider

• Taps promising markets (e.g. markets for local and sustainable beverages)
• Has a story of local roots that can compete with wine and beer
• Agritourism potential to support rural economies
• The focus on quality can command price premiums
What Defines “Craft” Cider?

“Mainstream” Ciders
- Made with concentrate, sweeteners, “natural” flavors, mass-produced, like apple soda

“Hybrid” Ciders
- Often made with eating apple seconds or dual purpose apple varieties, usually local or regional

“Craft” Ciders
- Made with specialty cider apple varieties, marketed like wine, usually local or regional
Beyond the Spectrum: Cider Styles

New World Cider
English Cider
French Cider
Spanish Cider
Ice Cider
Applewine
Cider with other fruit
Cider with herbs or spices
Hopped ciders
Perry

For more information see cider style guidelines:
What makes a good cider apple?

**Brix** – (Or specific gravity / sugar content) determines the potential alcohol percent of the cider. High brix is desirable, and many eating apples are too low.

**Acidity** - Balanced acidity is desired, often from blending low and high acid varieties.

**Tannins** – Tannins provide desirable bitterness and astringency that fills a cider out. Tannin levels are very low in eating apples and are sought after by cider makers.

**Mouthfeel** – A full bodied cider, not too watery, not too syrupy, is generally desired.

**Unique Flavors and Aromas** – Flavors and aromas in finished ciders can be subtle, but it is nice when an apple adds something beyond the basics.

**Appearance** – Generally clear cider is desired over cloudy, and juices can range from light straw to deep gold or even shades of pink and red.
## (Oversimplified) Economics of Growing Cider Apples

<table>
<thead>
<tr>
<th>Apples</th>
<th>Price</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialty cider apples (based on a Vermont survey)*</td>
<td>$20/bushel</td>
<td>Small sample size</td>
</tr>
<tr>
<td>Eating apples for cider (based on the same Vermont survey)*</td>
<td>$5/bushel</td>
<td>Small sample size</td>
</tr>
<tr>
<td>Specialty cider apples in Wisconsin (based on discussions with Wisconsin growers and cider makers)</td>
<td>$20-$25/bushel</td>
<td>Small sample size</td>
</tr>
<tr>
<td>Average price for fresh market apples in the US (based on 2012 Census of Agriculture, which had a record high price)</td>
<td>$15/bushel</td>
<td>This will vary considerably by region, apple variety, and other factors.</td>
</tr>
<tr>
<td>Typical “Pick Your Own” markets (rough estimate)</td>
<td>$40/bushel</td>
<td>Requires more marketing effort</td>
</tr>
<tr>
<td>Typical urban farmers markets (rough estimate)</td>
<td>$80/bushel</td>
<td>Requires considerably more marketing effort</td>
</tr>
</tbody>
</table>

Establishing a Cider Orchard: Feasibility Studies

General Findings:
• A specialty cider apple orchard can be profitable

Advantages:
• Cider apples don’t need to look good, which can reduce input costs

Risks:
• Uncertainty of the production dynamics and disease resistance of cider apple varieties

Sources:
Adding Value with Cider

Let’s assume that the apples cost $10/bushel to grow.

At $5/gallon for fresh juice, a grower barely covers costs.

At $10/bottle, we have increased the value by a factor of 10.*

*Of course making and marketing cider comes with additional costs that we will consider in the next slide.
A Hypothetical Example of Gross Margins on a $10 bottle of cider

Profit? = $1.00

Retailers margin = $3.00

Marketing costs = $0.75

Self distribution costs = $1.50

Paid labor costs for cider production = $0.50

Payments on building/equipment = $1.25

Cost of packaging (bottle, label, box) = $1.00

Cost of apples (at $10.00/bushel) = $1.00
Answering the question posed in the title of this presentation...

Does the emerging cider industry offer profitable new opportunities for apple growers?

YES!

But...

• Don’t expect to capture much of the value of mainstream ciders
• There are risks and uncertainties related to craft cider production
• Each business will have to calculate its own margins and consider its interests as well as its competitive advantages/disadvantages