Deal's Orchard
2017 Overall Revenue Breakdown

- Retail: 41%
- Wholesale: 10%
- Farmers' Market: 4%
- Agri-Entertainment: 45%
Hard Cider Production

<table>
<thead>
<tr>
<th>Year</th>
<th>Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>150</td>
</tr>
<tr>
<td>2012</td>
<td>385</td>
</tr>
<tr>
<td>2013</td>
<td>690</td>
</tr>
<tr>
<td>2014</td>
<td>1245</td>
</tr>
<tr>
<td>2015</td>
<td>1116</td>
</tr>
<tr>
<td>2016</td>
<td>1350</td>
</tr>
<tr>
<td>2017</td>
<td>2480</td>
</tr>
<tr>
<td>2018</td>
<td>3130</td>
</tr>
</tbody>
</table>
2010- First Attempt
CO2 Tank and Cornelius Kegs
Filling Bottles
Capping
Cider Composition

- **Recommended proportions:**
  - 30%-60% Nuetral Base (Red Delicious, Cortland)
  - 10%-20% Tart (Jonathan, Wealthy, Winesap)
  - 10%-20% Aromatic (Red Delicious, McIntosh)
  - 5%-20% Astringent: (Crab apples or wild apples)

- **Our actual blend**
  - Jonathan, Yellow Delicious, Red Delicious, Honeycrisp, Chieftan, Haralson, and Empire
  - We attempt to have a higher ratio of tart to sweet when pressing cider to ferment

*Cider: Making, Using & Enjoying Sweet & Hard Cider*
# Apple Varieties

<table>
<thead>
<tr>
<th>Lodi</th>
<th>Pippin</th>
<th>Jonagold</th>
<th>Chieftain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duchess</td>
<td>Macintosh</td>
<td>Empire</td>
<td>Rome Beauty</td>
</tr>
<tr>
<td>Whitney Crab</td>
<td>Chenanego</td>
<td>Snow</td>
<td>Winesap</td>
</tr>
<tr>
<td>Paula Red</td>
<td>Gala</td>
<td>Red Delicious</td>
<td>Fuji</td>
</tr>
<tr>
<td>Earliblaze</td>
<td>Sharon</td>
<td>Honey Crisp</td>
<td>Braeburn</td>
</tr>
<tr>
<td>Earligold</td>
<td>Cortland</td>
<td>Yellow Delicious</td>
<td>Arkansas Black</td>
</tr>
<tr>
<td>Zestar</td>
<td>Jonathan</td>
<td>Grimes Golden</td>
<td>Evercrisp*</td>
</tr>
<tr>
<td>Wealthy</td>
<td>Jonadel</td>
<td>Haralson</td>
<td>Granny Smith*</td>
</tr>
</tbody>
</table>
Fermentation

- Natural yeast vs. store bought yeast
  - Natural yeast is hit or miss
  - To kill natural yeast
    - $\frac{1}{2}$ tsp potassium metabisulfite per 30 gallon barrel
    - Campden tablet: 1 crushed tablet per gallon cider

- How long does fermentation last?
  - Sugar content
    - Hydrometer: Measures sugar content in juice based on density
  - Ambient temperature
    - The colder the temperature, the slower the yeast will work
  - Yeast strain
Fermentation

- Fermentation
  - Granular Yeast
    - EC-1118, Red Star Premier Blanc, Cote des Blancs
    - Activate yeast with warm water
  - Ferment to dry
  - Rack to new barrels
- Cold Crash – allow sediment to drop
  - Placed in walk-in cooler (33° - 35°)
  - Minimum 1 week
Adding Flavors

- How do I make different flavors of hard cider?
  - Ferment with other fruits
  - Backsweeten with fruit flavorings
    - GLCC Flavors
    - Flavorings can change tax classification
Carbonation

● How do I carbonate hard cider
  ● Bottle Carbonation (self carbonates)
    ● Place a small amount of sugar into bottle before capping
    ● Too much sugar can result in a bottle bomb
    ● Cider will be dry (not sweet)
  ● Forced Carbonation
    ● Equipment necessary: CO2 Tank, regulator, tubing, keg or brite tank
    ● Allows for quicker carbonation and more controlled
  ● Carbodoseur
    ● Tool used to check CO2 levels in beverages
Storage: Brite Tanks
Bottling Cider

- What equipment do I need to bottle?
  - Caps and capper
  - Beer gun or counter pressure filler
Marketing Your Cider

- Marketing your cider
  - Must be licensed to sell (state and federal)
  - On site sales or off-site sales
    - Classification of Native Brewery vs. Native Winery
    - Taxes
    - Insurance
- Wholesale
  - Craft Breweries
  - Drink local
- Best container?
  - Bottle, growler, kegs
Seating area
Ciders at Sunset