Economic Truths

Sour Cherries & Haskaps

Good work, but I think we might need just a little more detail right here...

RISKS AND REALITIES

Realties – Sour Dwarf Cherry

- Still a developing industry
- Competition to the east (and beyond)
- Where is the market?
  - Who will buy?
- Prices are still a big guess
- It takes 4-5+ years to reach decent levels of production

NOTE: Guidelines only

Realities - Haskap

- Still a developing industry
- Where is the market?
  - Who will buy?
- Prices are still a big guess
- Yields are not high (that we know of)
  - Even though they are precocious, it still takes 5+ years to reach any sort of production
  - Bird predation is a threat to yields

NOTE: Guidelines only
**Financial Realities**

- Long Return on Investment (ROI)
- Land costs
  - Variable

**Upfront Input Costs**

- Fence / Netting
- Plant material
- Other inputs
  - Mulch?
  - Fertilizer
  - Etc.

**Upfront Input Costs**

- Equipment
  - Tractor, harvester, etc.
- Post-harvest handling equipment (storage, cooling, freezer, etc.)

**Preparatory Activities**

- Spending time prior to planting/establishment will save time in future labour
  - Control weeds
  - Prepare soil
  - Build fertility
- But... it means more time and $ up front

**Equipment**

- The amount of equipment required will vary
- Might rent certain pieces or purchase
  - Depends on plan
- Tractor (creeper gear), harvester (maybe), transplanter, mulch layer, sprayer, etc.

**Post-harvest**

- Cooling
- Freezer
- Storage (frozen) space
- Equipment
  - Sorting / grading
  - Etc.

*Specific to Cherries = pitter*
Labour

- You
- Hired Labour

Annual Crop Production Inputs

- Fertilizer
- Pest Management
- Pruning
- Weeding / Maintenance
- Irrigation
- Etc.

Plant Material – DSC

- Planting density
  - 300 – 700 plants per acre (+/-)
- Cost per Plant
- Variety
- Royalties
- Labour for planting

Plant Material – Haskap

- Planting density
  - 900-1100 plants per acre (+/-)
- Cost per Plant
- Variety
- Royalties
- Labour for planting

Haskap cost estimates

<table>
<thead>
<tr>
<th>Establishment Costs</th>
<th>Annual Maintenance Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plants</td>
<td>Total Costs per Acre*</td>
</tr>
<tr>
<td>$4400 – $6600</td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td></td>
</tr>
<tr>
<td>$3000</td>
<td></td>
</tr>
<tr>
<td>Equipment (base)</td>
<td></td>
</tr>
<tr>
<td>$2200+</td>
<td></td>
</tr>
<tr>
<td>Irrigation</td>
<td>$1500+</td>
</tr>
<tr>
<td>Production Inputs</td>
<td>$2200+</td>
</tr>
<tr>
<td>(includes: fertilizer, weeding, fuel, installation costs &amp; other)</td>
<td></td>
</tr>
</tbody>
</table>

Total Cost per Acre*: $23,300 – $35,500

Labour costs: Would be significant

*Assuming 1100 plants per acre

Estimated Revenue - Haskaps

<table>
<thead>
<tr>
<th>Haskaps</th>
<th>U-pick (n=3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>Average</td>
</tr>
<tr>
<td>(price per pound)</td>
<td>(price per pound)</td>
</tr>
<tr>
<td>$3.0 - $5.0</td>
<td>$4.5</td>
</tr>
</tbody>
</table>

Source: Alberta Direct Market Average Fruit and Vegetable Prices - 2016-2017

Average Estimated Yields

<table>
<thead>
<tr>
<th></th>
<th>Kg per bush</th>
</tr>
</thead>
<tbody>
<tr>
<td>700 plants</td>
<td></td>
</tr>
<tr>
<td>900 plants</td>
<td></td>
</tr>
<tr>
<td>1100 plants</td>
<td></td>
</tr>
<tr>
<td>1500 plants</td>
<td></td>
</tr>
</tbody>
</table>

2.5x (quadruple higher)

- 2100+ 2700+ 3300+ 4500+

Production Estimates

Year 0-2 Year 3 Year 4 Years 5+ Years 6+

0 33% 66% 90% Full

NOTE: Guidelines only
Losses

- Harvest Losses
  - Harvester efficiencies vary
  - Could by 10+%
- Birds / Other predation / Weather-related losses
  - Could be significant
- Spoilage
  - 1-5%, depending on conditions

NOTE: Guidelines only

Estimated Revenue - DSC

Dwarf Sour Cherries

<table>
<thead>
<tr>
<th></th>
<th>U-pick (n=4)</th>
<th>Pre-Pick (n=4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range (price per pound)</td>
<td>Average (price per pound)</td>
<td>Average (price per pound)</td>
</tr>
<tr>
<td>$2.0 – $5.0</td>
<td>$3.0</td>
<td>$2.0 – $3.5</td>
</tr>
<tr>
<td>$2.0 – $3.5</td>
<td>$2.75</td>
<td>$2.75</td>
</tr>
</tbody>
</table>

Source: Alberta Direct Market Average Fruit and Vegetable Prices - 2016-2017

Average Estimated Yields

<table>
<thead>
<tr>
<th>Kg per bush</th>
<th>Kg per acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – Handfull</td>
<td>0.5 – 1kg/bush</td>
</tr>
<tr>
<td>0.5 – 1kg/bush</td>
<td>5-10kg</td>
</tr>
<tr>
<td>5-10kg</td>
<td>10-15kg/bush</td>
</tr>
</tbody>
</table>

Rob Spencer, BSA, MSc, P.Ag.
Commercial Horticulture Specialist

robert.spencer@gov.ab.ca

Alberta Ag-Info Centre

310-FARM

QUESTIONS???