Hogue Viticulture Practices for Quality
Rick Hamman: Grower Relations/Viticulturist

www.hoguecellars.com
Hogue Evolution

• 1984 – a family-owned business
  – 7000 cases/year
  – Sourcing fruit from five vineyard blocks
  – Producing 6 products

• 2005 – a corporate business - Vincor
  – 550,000 cases/year – 06 to 650,000 cases
  – 280 blocks from 56 vineyards
  – Producing 34 products within 7 brands
  – 38 Full Time Employees
Washington Wine Industry

- Acres: 30,000
- 6 Appellations – YV, WW, CV, PS, RM, CG
- Wineries: 300+ (10 = 85% Production)
- Growers: 300+
- 03 Tons = 112,000 tons (04 – 105,000)
  - 54% White 03 – CH#1 = 31,300 tons
  - 46% Red 03 – MR#2 = 20,900
  - State Ave. Price $920/ton (White =$738, Red = $1135)

Source: WWC, WASS
Hogue Grape Sourcing - 04

Wahluke Slope: 1264 Tons
3297 GDD

Tri Cities: 40 Tons
3189 GDD

Yakima Valley: 4573 Tons
2778 GDD

Alderdale: 2045 Tons
3330 GDD

Walla Walla: 0 Tons
2865 GDD
• Mid-Winter 1949 = -8 F
• Winter 1950 = -20
• January 1957 = -18
• December 1964 = -7
• December 1968 = -11
• November 1972 = -7
• December 1978-79 = -4
• December 1983 = -14
• December 1990-91 = -8
• January 1996 = -18
• January 2004 = -7 (range - 4 to -18)
• **20% or less** primary bud death = Normal pruning (CH – 12 three bud spurs/vine)
• **20-30% death** = prune normal + 2 extra spurs/side (CH – 16 three bud spurs/vine)
• **30-50% death** = hedge prune approximately 6-8 inches above cordon, follow up with hand thinning spurs leaving 16-30 spurs/vine.
• **50-90% death** = hedge prune approximately 6-8 inches above cordon and no spur adjustment. Adjust later, in mid-May if needed.
• **90% death and greater** = No pruning. Re-assess in mid-May.
Accumulated Growing Degree Days Base 50

Accumulated Growing Degree Days (°F) for Nov 1

- Long term 2535.87
- 1998: 2871.06
- 1999: 2241.61 (cool year)
- 2000: 2491.87
- 2001: 2617.82
- 2002: 2526.39
- 2003: 2909.95 (warm year)
- 2004: 2778.04

Graph showing accumulated GDD from April to November with specific years marked.
Glacial flood sediment and wind blown Soils
Sandy Loams – pH 6.6 - 8.3
10 – 60” deep over basalt

Basalt bedrock
Glacial Lake Missoula and path of its floods
Hogue Cellars Viticulture 2004

- **Staff:** 3 - Full Time
  - 2 - Seasonal – Intern students
  - 4 - Additional (peak season – July crop estimators)

- **Responsibilities:** 1830 acres, 40 growers, 280 blocks
  - “Quality control” in 56 vineyards
    - Advisory- site visits, newsletters, grower meetings
    - Grower liaison
    - Crop estimation
    - Vineyard monitoring
    - Research Trials – MPCT, irrigation, Thinning
    - Misc. – GPS mapping
Grape/Wine Quality Assurance Feedback Loop

Winter Inspection

Bud-break

Harvest

Crop Estimation

Maturity Sampling

Wine Evaluation

Winemaking

Pruning

Grape/Wine Quality

Growing Season

Bi-weekly Inspections

Vineyard Goals

Grower Meeting
Hogue Grower Relations

Communication:
- 4 – Newsletters
- Bi-weekly Observations Emailed- Each block 2X/month, (pruning, thinning, leafing, pest/disease, nutrition)
- Individual Grower Meetings (Dec.- March) yearly report, WM
- All Hogue Grower Meeting (February)
- Site Visits/Phone – as needed

Crop Estimation:
- Blocks Sampled- July
- Recommendations – 3rd week July
- Re-sampling – through 3rd week August

Maturity Sampling:
- Hogue and Grower samples – emailed
- Harvest Scheduling - WM
# 2004 Hogue Grape Pricing

<table>
<thead>
<tr>
<th>VARIETY</th>
<th>TARGET YIELD/ACRE</th>
<th>MINIMUM BRIX</th>
<th>PRICE/WAVGG</th>
<th>GENESIS RESERVE</th>
<th>2004 PRICING</th>
<th>2003 PRICING</th>
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Hogue Ave. $893/ton w/o bonus
Hogue 2004
1830 Acres

MR 23%
WR 20%
CH 17%
CS 20%
SY 5%
SB 5%
other 10%
186
309
421
375
83
99
357

Other = CF, CB, GT, LM, MA, PB, PS, PG, SN, SE, VG
Hogue Crush – 2004
7916 Tons

Other = CF, CB, GT, LM, MA, PB, PS, PG, SN, SE, VG
Hogue Yields

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<th>SY</th>
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<td>4.97</td>
<td>4.95</td>
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<td>7 yr Ave</td>
<td>5.35</td>
<td>5.23</td>
<td>4.9</td>
<td>3.85</td>
<td>4.07</td>
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Hogue Cluster Weights

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<tr>
<td>SB</td>
<td>0.19</td>
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<tr>
<td>WR</td>
<td>0.25</td>
<td>0.25</td>
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<tr>
<td>CH</td>
<td>0.21</td>
<td>0.22</td>
</tr>
<tr>
<td>CS</td>
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<td>0.29</td>
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<tr>
<td>MR</td>
<td>0.24</td>
<td>0.29</td>
</tr>
<tr>
<td>SY</td>
<td>0.21</td>
<td>0.29</td>
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</table>
Hogue Clusters/Vine

SB | WR | CH | CS | MR | SY
---|----|----|----|----|----
2004 | 69 | 81 | 61 | 63 | 47 | 45
7 yr Ave | 75 | 96 | 60 | 54 | 48 | 33
Vineyard Monitoring
Vineyard inspections

Data collected on Palm Pilots.

Able to modify and send reports to growers.
April 18th

Admire, Applaud, Lorsban
### Precipitation: Prosser, WA

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Precipitation</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
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<tr>
<td>2004</td>
<td>4.03 inches</td>
<td>0.22</td>
<td>0.51</td>
<td>1.5</td>
<td>0.0</td>
<td>1.14</td>
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<td>7 year Average*</td>
<td>3.48 inches</td>
<td>0.59</td>
<td>0.61</td>
<td>0.65</td>
<td>0.21</td>
<td>0.27</td>
<td>0.41</td>
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*Prosser WSU PAWS
Open Canopy
Leaf Stripping
Drop Rot
Botran?
Goal
Roundup
Gramoxone
Surflan
June 2
Roundup Injury
July 5th – Crop Estimating
Harvest Vines 6-20/Block
Weight
Cluster #
Prediction – previous cl/wt
Hogue Crop Estimate - 04

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<td>508</td>
<td>1999</td>
<td>1453</td>
<td>1311</td>
<td>1606</td>
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<td>Actual</td>
<td>474</td>
<td>1824</td>
<td>1454</td>
<td>1383</td>
<td>1587</td>
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September 2nd
Hogue Thinning Trial 04

**Anthocyanin**

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<th>4 wk postV</th>
<th>No Thin</th>
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<tbody>
<tr>
<td>CS</td>
<td>513</td>
<td>550</td>
<td>577</td>
<td>500</td>
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<tr>
<td>MR</td>
<td>1049.634</td>
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**Brix**

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<tr>
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<tr>
<td>CS</td>
<td>25.0</td>
<td>25.4</td>
<td>25.0</td>
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<td>MR</td>
<td>24.3</td>
<td>25.4</td>
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**CS Berry Weight**

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<th>Veraison</th>
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<tr>
<td>Grams</td>
<td>1.16</td>
<td>1.15</td>
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**CS Weight/Vine**

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<td>Lbs</td>
<td>10.75</td>
<td>9.14</td>
<td>8.08</td>
<td>14.71</td>
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ZRCS Irrigation Trial 04

**ZRCS Cluster Weight**

- Cluster 12h/wk: 0.311 lbs
- Cluster 8h/wk: 0.310 lbs
- Cluster 6h/wk: 0.245 lbs

**ZRCS Brix**

- Brix 12h/wk: 27.1
- Brix 8h/wk: 27.2
- Brix 6h/wk: 26.9

**ZRCS pH**

- pH 12h/wk: 3.26
- pH 8h/wk: 3.25
- pH 6h/wk: 3.31

**ZRCS Color**

- Absorbance 12h/wk: 581
- Absorbance 8h/wk: 480
- Absorbance 6h/wk: 483
SSCS Minimal Pruning Trials 04

Cluster Weight

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<th></th>
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<th>C</th>
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Berry Weight

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<td>gram</td>
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Brix

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Color

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<th>MP</th>
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<td>Absorb</td>
<td>687</td>
<td>854</td>
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<tr>
<td>Anthocyanin</td>
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Chardonnay 2002 – Viticulture Data

- **Fruit Forward - $10/bottle**
  - Yield – 6.4t/a
  - Shoots/vine - 41
  - Clusters/vine – 74
  - Cluster Weight – 0.24lbs
  - Cordon Suckered- May
  - Cluster Thinned
    - July/August
  - Machine Picked – 9/10-10/01

- **Reserve - $22/bottle**
  - Yield – 5.4t/a
  - Shoots/vine - 31
  - Clusters/vine – 50
  - Cluster Weight – 0.30lbs
  - Cordon Suckered - May
  - Cluster Thinned-
    - 3rd Week in July
  - Hand Picked – 9/16
Chardonnay 2002 – Enology Data

- **Fruit Forward $10/bottle**
  - Brix – 23.3°
  - TA – 0.60g/100ml
  - pH – 3.52
  - Alcohol – 13.5%
  - Cases – 74,959
  - 68% SS Tank Ferment
  - 32% Barrel Ferment - 5m
  - 40% ML
  - Release Date: April 2004

- **Reserve - $22/bottle**
  - Brix – 23.9°
  - TA – 0.64g/100ml
  - pH – 3.47
  - Alcohol – 14.2%
  - Cases – 479
  - 100% Barrel Ferment
  - 100% ML
  - Sur Lie – 14months
  - 73% New French Oak
  - Release Date: March 2004