USDA NASS Hop Survey Program

HGA Annual Meeting Portland 2020

United States Department of Agriculture
National Agricultural Statistics Service
Mark Cerise USDA/NASS Northwest RFO

January 24, 2020
NASS Hop Survey Info

- Execute Five Surveys Annually and a Complete Census every 5 years
- All five annual surveys involve hop growers in ID, OR and WA
- Three surveys are focused on acreage and production
  - June Grower Inquiry – Hops acreage strung for harvest
  - August Production Forecast
  - November Production and Acreage – Actual Harvested Data
    - Estimate a State and National value of production
    - Release: National Hop Report; December 18, 2020
- Two surveys are focused on Hop stocks ➔ Hop Growers PLUS Hop dealers, Large Brewers, and 50 largest Regional Craft Brewers
  - March Hop Stocks – Estimate Stocks for brewer and dealer/grower categories
    - Focus: Initial flow of 2019 crop into supply chain
  - September Hop Stocks – Same estimate but focus shifts to disappearance of stocks
Some NASS Hop Survey Attributes

• The June and November acreage and production surveys have the highest response rates in NASS
  – The acreage and production numbers typically have complete returns for over 98% of the acreage strung for harvest
  – Large amount of time spent on data collection
  – Over 30% of data collected via “Web”

• The two Hop stock surveys also enjoy good response rates for the dealers/growers and Brewers
  – We enjoy reliable response from the largest dealers and brewers
  – Continually working to improve the brewer sample
  – Survey the length of the supply chain
Sitting at Record Level USA Hops Harvested Acreages
Also Currently Sit at Record Production Levels
Quick Look Back: 2018 and 2019 Hops Acreage and Production Summary

• 2018 Harvested acres: 55,035 ➔ 56,544
  – Highest in survey history (third year in a row)

• Average Yield: 1,943 ➔ 1981 pounds per acre (slight trend up from 2017)

• Total production: 106,906,700 ➔ 112,041,200lbs.
  – Highest in survey history (third year in a row)

• 2019 Value of production: $636,580,000
  – Average Cost Per Pound of Dry Hops in 2019 was 5.68$ per pound
Some quick things to discuss

• Continually looking for ways to improve our counts and what we publish
  – Evaluating Hop Variety Questionnaire for additions and deletions now for our 2020 cycle
• Estimate for Non-Response
  – Stocks
  – Acreage and production
• Data we collect versus data we publish
  – Stocks – publish at the USA level
  – Acreage and production
# Hop Varieties in 2019 Survey

<table>
<thead>
<tr>
<th>Variety</th>
<th>YCR 1, Ahtanum™</th>
<th>Calypso™</th>
<th>Ekuanot™, HBC 366</th>
<th>Loral™ HBC 291</th>
<th>Saaz</th>
<th>YCR-5, Warrior™</th>
</tr>
</thead>
<tbody>
<tr>
<td>VGXP-01</td>
<td>Amarillo™ R</td>
<td>Cashmere</td>
<td>Eureka™</td>
<td>Magnum</td>
<td>Strata™ OR 91331</td>
<td>Willamette</td>
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<tr>
<td>ADHA-483</td>
<td>Azacca™</td>
<td>Chinook</td>
<td>Fuggle</td>
<td>Millennium</td>
<td>Strata™ OR 91331</td>
<td>Sabro™ HBC 438</td>
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<tr>
<td>ADHA-881</td>
<td>Jarrylo™</td>
<td>HBC 394, Citra™ R</td>
<td>Galena</td>
<td>HBC 369, Mosaic™ R</td>
<td>Sorachi Ace</td>
<td>Zeus</td>
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<tr>
<td>Apollo™</td>
<td>Cluster</td>
<td>Glacier</td>
<td>Mt. Hood</td>
<td>Sterling</td>
<td>Other – Please List Variety:3813</td>
<td></td>
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<tr>
<td>Bitter Gold</td>
<td>Columbus/Tomahawk™ R</td>
<td>Golding</td>
<td>Mt. Rainier</td>
<td>Summit™</td>
<td>Other – Please List Variety:3823</td>
<td></td>
</tr>
<tr>
<td>Bravo™</td>
<td>Comet</td>
<td>Hallertauer</td>
<td>Northern Brewer</td>
<td>Super Galena™</td>
<td>Experimental</td>
<td></td>
</tr>
<tr>
<td>Brewers Gold</td>
<td>Crystal</td>
<td>Horizon</td>
<td>Nugget</td>
<td>Tahoma</td>
<td></td>
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<tr>
<td>Bullion</td>
<td>Delta™</td>
<td>Idaho 7™</td>
<td>YCR-4, Palisade™ R</td>
<td>Tettnang</td>
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<tr>
<td>Cascade</td>
<td>Pahto HBC-682</td>
<td>Lemon Drop™</td>
<td>ADHA-871,-Pekko™™</td>
<td>Meridian</td>
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<tr>
<td>Centennial</td>
<td>El Dorado™ R</td>
<td>Liberty</td>
<td>Perle</td>
<td>Vanguard</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Top 15 highlighted – Also 2 new varieties added in 2019 survey
Thank you

- Thank you for your participation in all NASS surveys!
- Appreciate comments on crop quality and grower challenges
- If you have any questions.
  - Mark Cerise; 360-890-3308; Mark.Cerise@usda.gov

Quick Statistics Link:
https://quickstats.nass.usda.gov/

Publication Link:
### 13 Year View Hop Stocks - Disappearance Ratios

<table>
<thead>
<tr>
<th>YEAR</th>
<th>STOCKS Mar 1 (000 lbs.)</th>
<th>STOCKS Sept 1 (000 lbs.)</th>
<th>Disappear (000 lbs.)</th>
<th>Disappear/ previous prod yr.</th>
<th>Disappear /March of that year</th>
<th>2 per. Mov. Avg. (Disappear (000 lbs.))</th>
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<tbody>
<tr>
<td>2007</td>
<td>47,000</td>
<td>66,000</td>
<td>23,000</td>
<td>40%</td>
<td>33%</td>
<td>30%</td>
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<tr>
<td>2008</td>
<td>70,000</td>
<td>66,000</td>
<td>23,000</td>
<td>32%</td>
<td>33%</td>
<td>30%</td>
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<tr>
<td>2009</td>
<td>82,000</td>
<td>83,000</td>
<td>21,000</td>
<td>21%</td>
<td>21%</td>
<td>20%</td>
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<tr>
<td>2010</td>
<td>102,000</td>
<td>87,000</td>
<td>15,000</td>
<td>20%</td>
<td>28%</td>
<td>20%</td>
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<tr>
<td>2011</td>
<td>121,000</td>
<td>96,000</td>
<td>25,000</td>
<td>37%</td>
<td>52%</td>
<td>50%</td>
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<tr>
<td>2012</td>
<td>120,000</td>
<td>115,000</td>
<td>5,000</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>2013</td>
<td>119,000</td>
<td>128,000</td>
<td>9,000</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
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<td>2014</td>
<td>140,000</td>
<td>85,000</td>
<td>55,000</td>
<td>45%</td>
<td>45%</td>
<td>30%</td>
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<tr>
<td>2015</td>
<td>113,000</td>
<td>34%</td>
<td>88,000</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
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<tr>
<td>2016</td>
<td>115,000</td>
<td>33%</td>
<td>88,000</td>
<td>33%</td>
<td>33%</td>
<td>30%</td>
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<tr>
<td>2017</td>
<td>169,000</td>
<td>30%</td>
<td>140,000</td>
<td>33%</td>
<td>33%</td>
<td>30%</td>
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<tr>
<td>2018</td>
<td>165,000</td>
<td>47%</td>
<td>150,000</td>
<td>47%</td>
<td>47%</td>
<td>45%</td>
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<tr>
<td>2019</td>
<td>160,000</td>
<td>47%</td>
<td>165,000</td>
<td>47%</td>
<td>47%</td>
<td>45%</td>
</tr>
</tbody>
</table>
Hops – 2019 Leading Varieties - Top 15

- Alpha
  - Zeus
  - Columbus/Tomahawk\textsuperscript{R}
  - Pahto HBC-682
  - Summit\textsuperscript{TM}
  - Nugget
  - Apollo

- Aroma/Dual Purpose
  - HBC 394, Citra\textsuperscript{R}
  - Cascade
  - Centennial
  - YCR 14, Simcoe\textsuperscript{R}
  - VGXP-01 Amarillo\textsuperscript{R}
  - Chinook
  - HBC 369, Mosaic\textsuperscript{R}
  - Willamette
  - El Dorado

These 15 Varieties made of close to 80% of Planted Acreage in the June 2019 survey.