

Brewers Association 2019 Hop Industry Update

2018 Hop Survey Results
Inventory and National Hop Report
Federal Affairs



“There is at least one point in the history of any company when you have to change dramatically to rise to the next level of performance. Miss that moment - and you start to decline”

- Andy Grove, Intel

Objectives

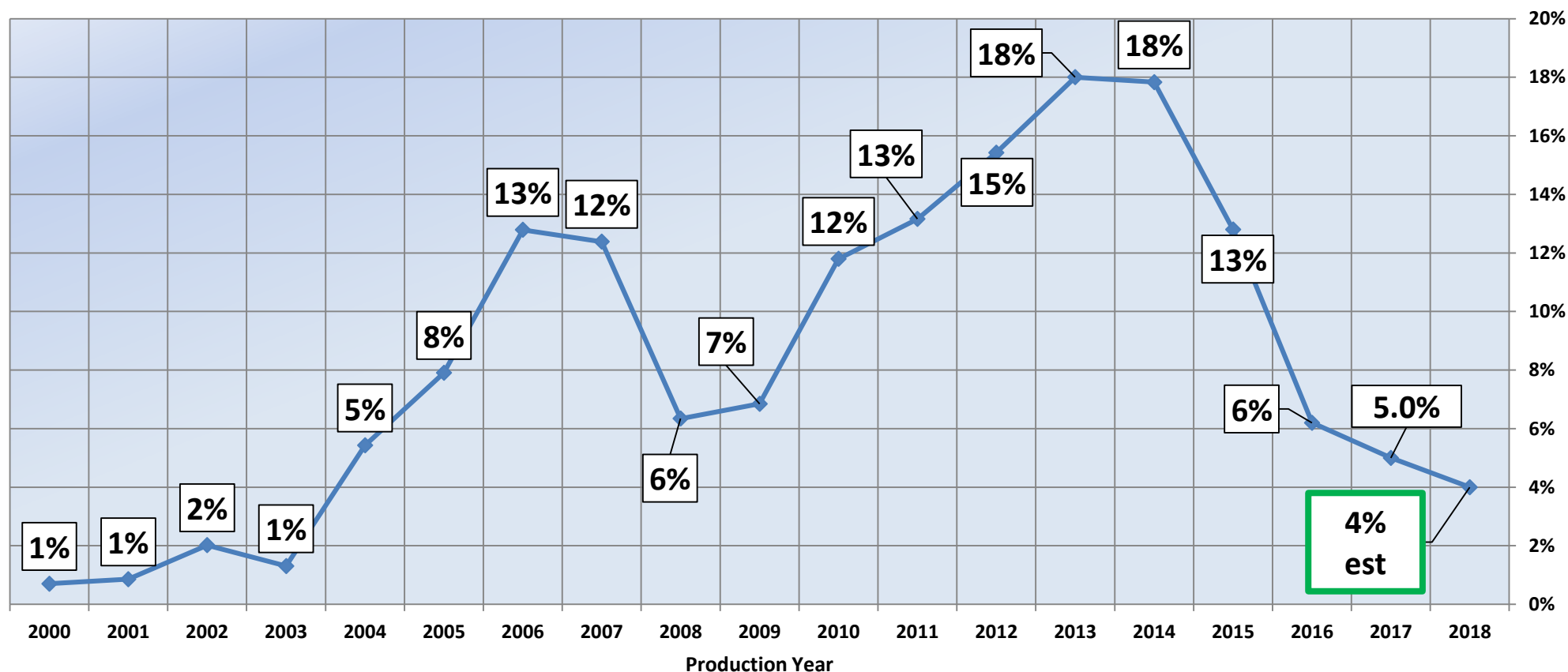
- **Brewing & Hop Industry Updates**
- **Annual BA Hop Usage Survey Results**
- **USDA-NASS Hop Stocks Report Analysis**
- **Federal Affairs Update**
- **Grants & Research Support**
- **Public Breeding Sensory Update**

2018 Brewing Industry Update

- Total U.S. beer sales down **~1.0%**
- Imports grew, but U.S. domestic volume was off **~1.5-2%**
- Craft volume growth rate remained positive at **~4%**, landing at around **26 MM barrels**
- Total number of U.S. breweries tops **7,000** for first time ever (6,150 one year ago)

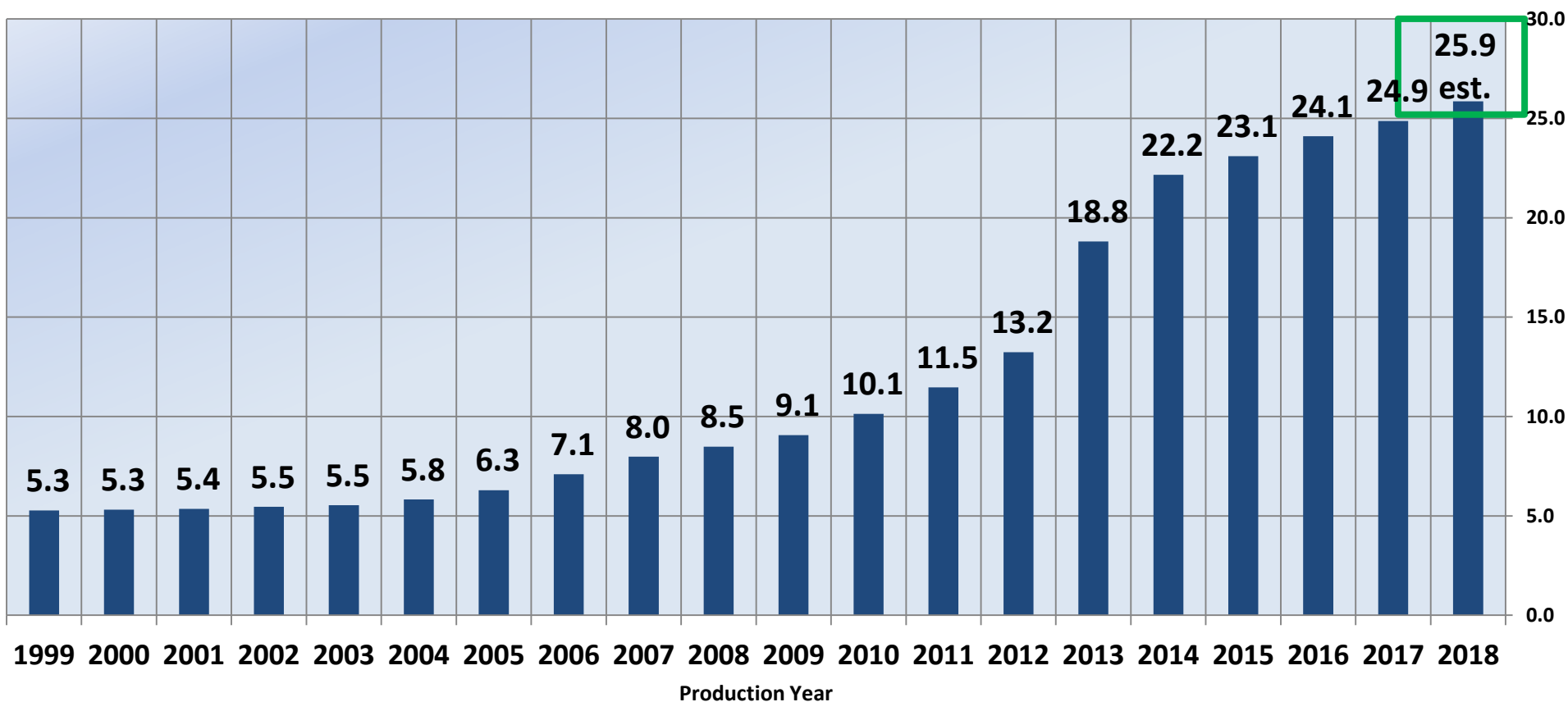
2018 Brewing Industry Update

US Craft Beer Volume Change YOY



2018 Brewing Industry Update

US Craft Beer Production Volume (MM US BBL)



2018 Hop Industry Update

- Ttl U.S. acres increased from 56,492 to **57,468 (+1.7%)**, an all-time high
PACNW acres increased by **1,046 (1.9%)**
Non-PACNW acres decreased by **70** from 2504 to **2433 (1.7%)**
- The proportion of aroma acreage actually decreased in 2018
- Ttl U.S. production increased from 107.5 MM to 108.4 MM pounds (**~1%** vs CY2017: **20%**). Non-PACNW production decreased **20%**
- PACNW yield down slightly from 1959 to 1943 pounds per acre (**~1%**)
Non-PACNW yield decreased 750 to 617 (**18%**)
- Idaho acreage surpassed Oregon as the number 2 U.S. hop acreage *and* production state
- Citra acreage surpassed Cascade (6,400 vs 6,200)

2018 Hop Industry Update

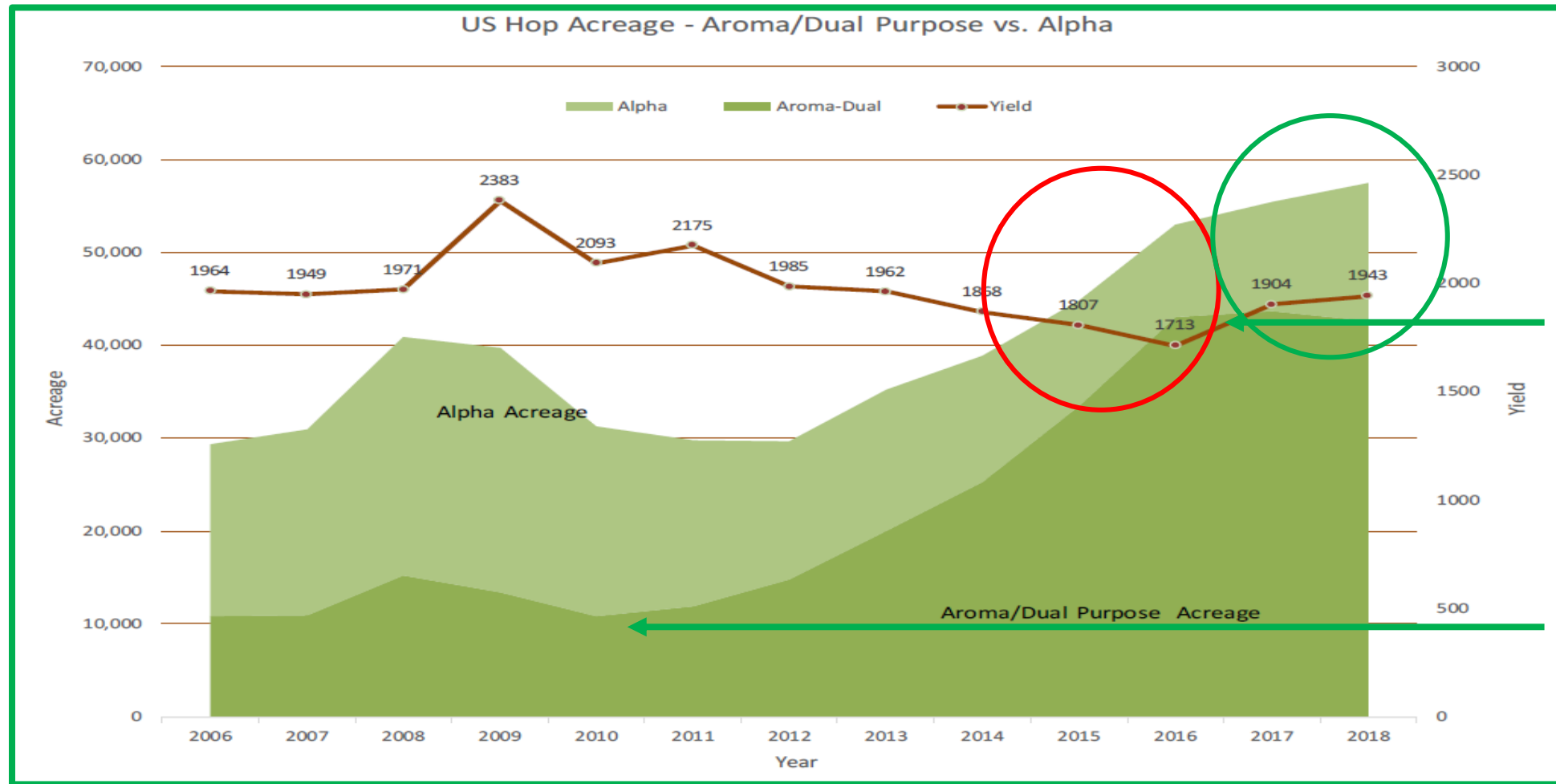
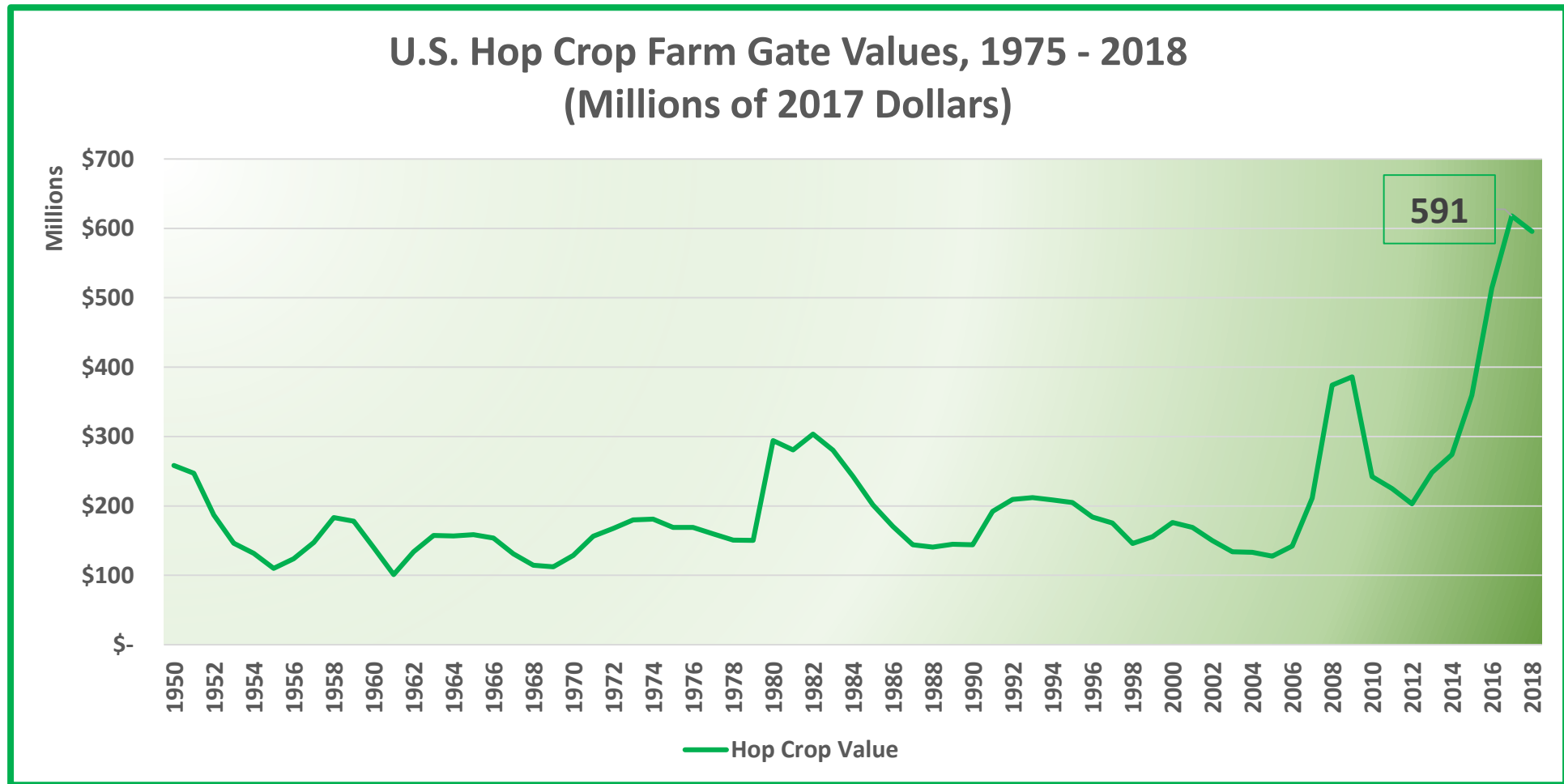


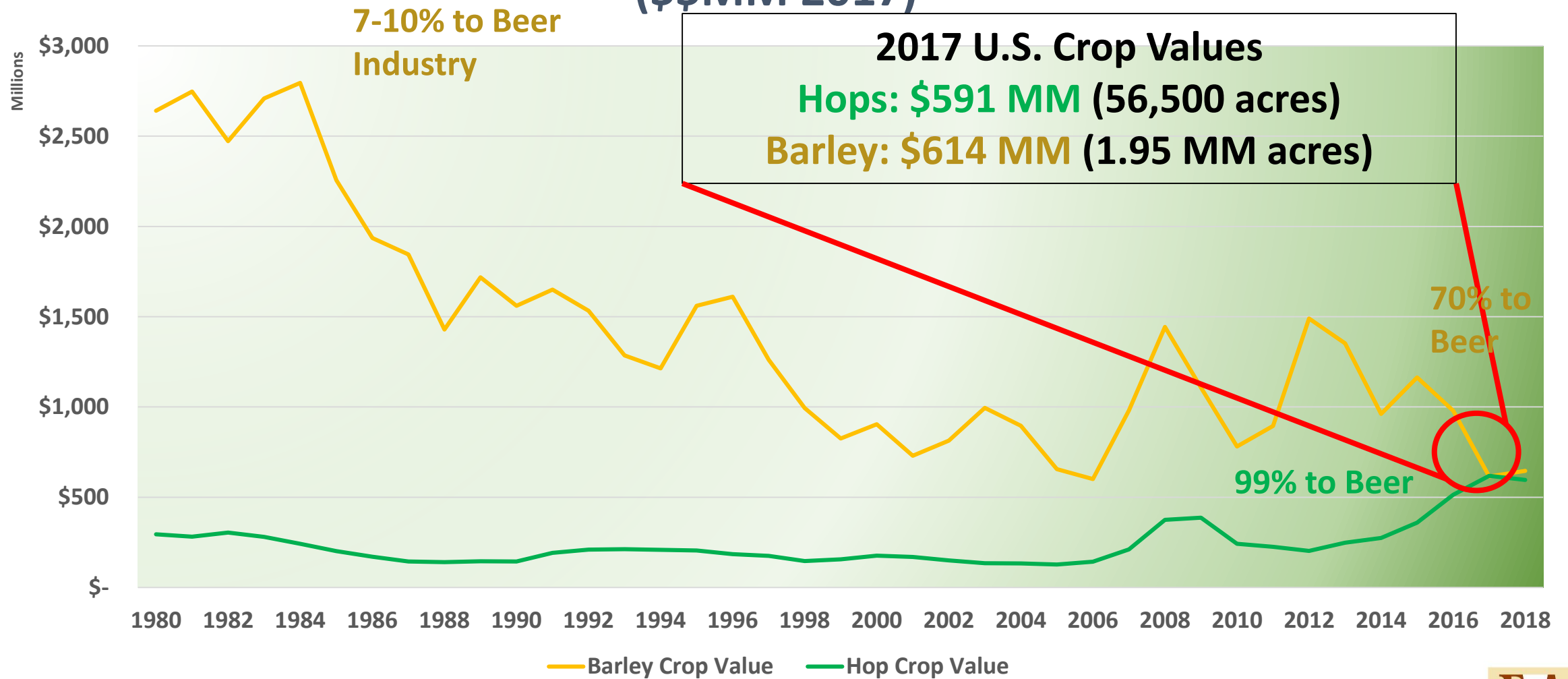
Chart Courtesy HGA Stat Pack © 2018

2018 Hop Industry Update



U.S. Barley vs Hop Crop Farm Gate Values, 1975 - 2018

(\$\$MM 2017)



2018 Brewers Association Hop Survey Results

- Annual Survey in July & August
- 11 Years of Data collected 2008 - 2018
- Look back to production years 2007 – 2017
 - 2018 Survey = 2017 Beer Production ~= 2016 Crop Yr
- **Only includes craft volume as defined**
- A SURVEY, so the results shown are NOT totals: “Actual Mileage May Vary”

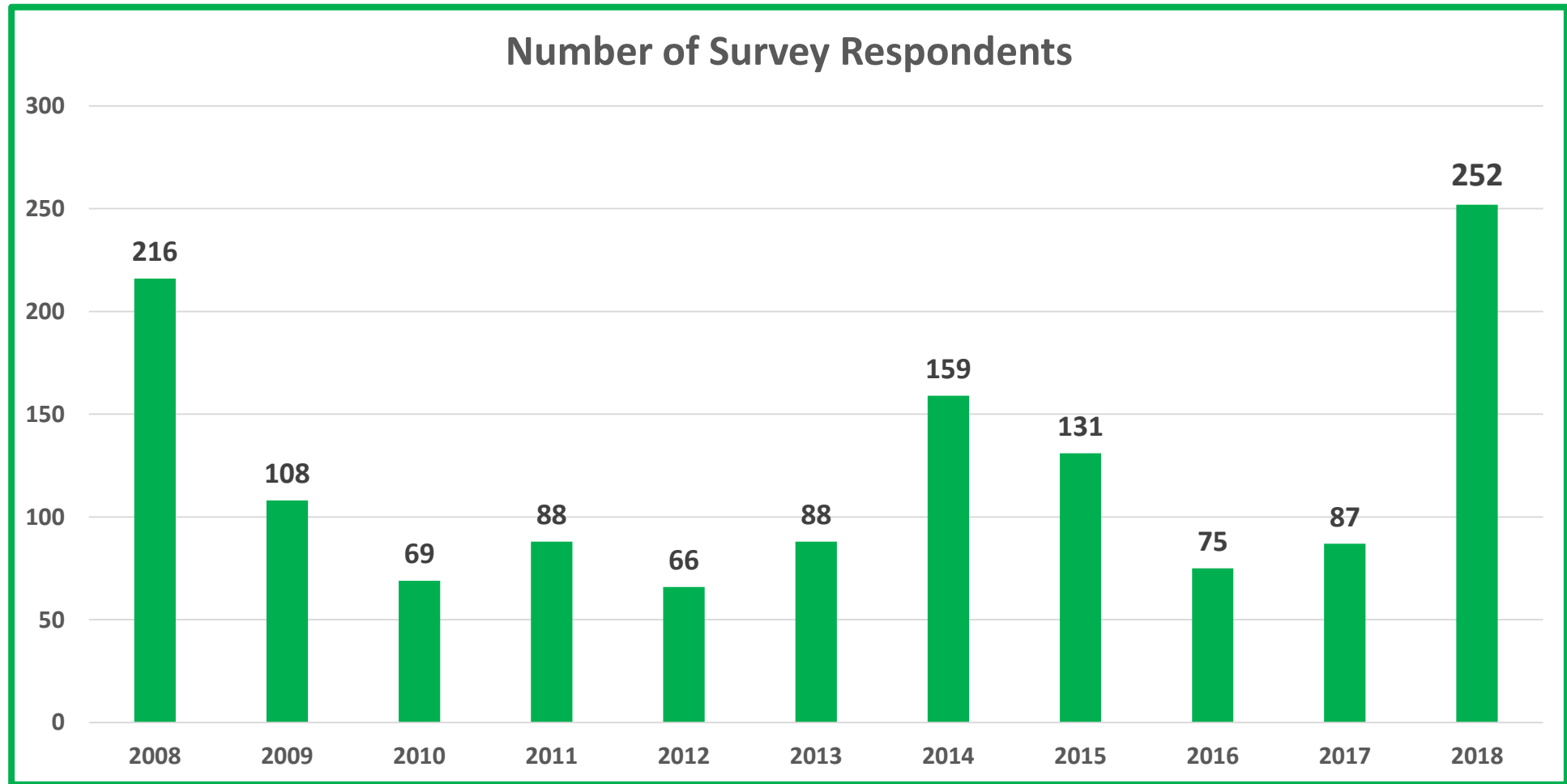
2018 Hop Survey Results Summary

- Number of Respondents at an all-time high (**250**)
- Hop Usage Rate: increased **+2.5%** over '17 rate from 1.54 to **1.58 PPB**
- Top Ten varieties shifted significantly in 2017 beer production year
- Licensed varieties continue to become more important
- Variety Usage increased to an all-time high of **154** varieties

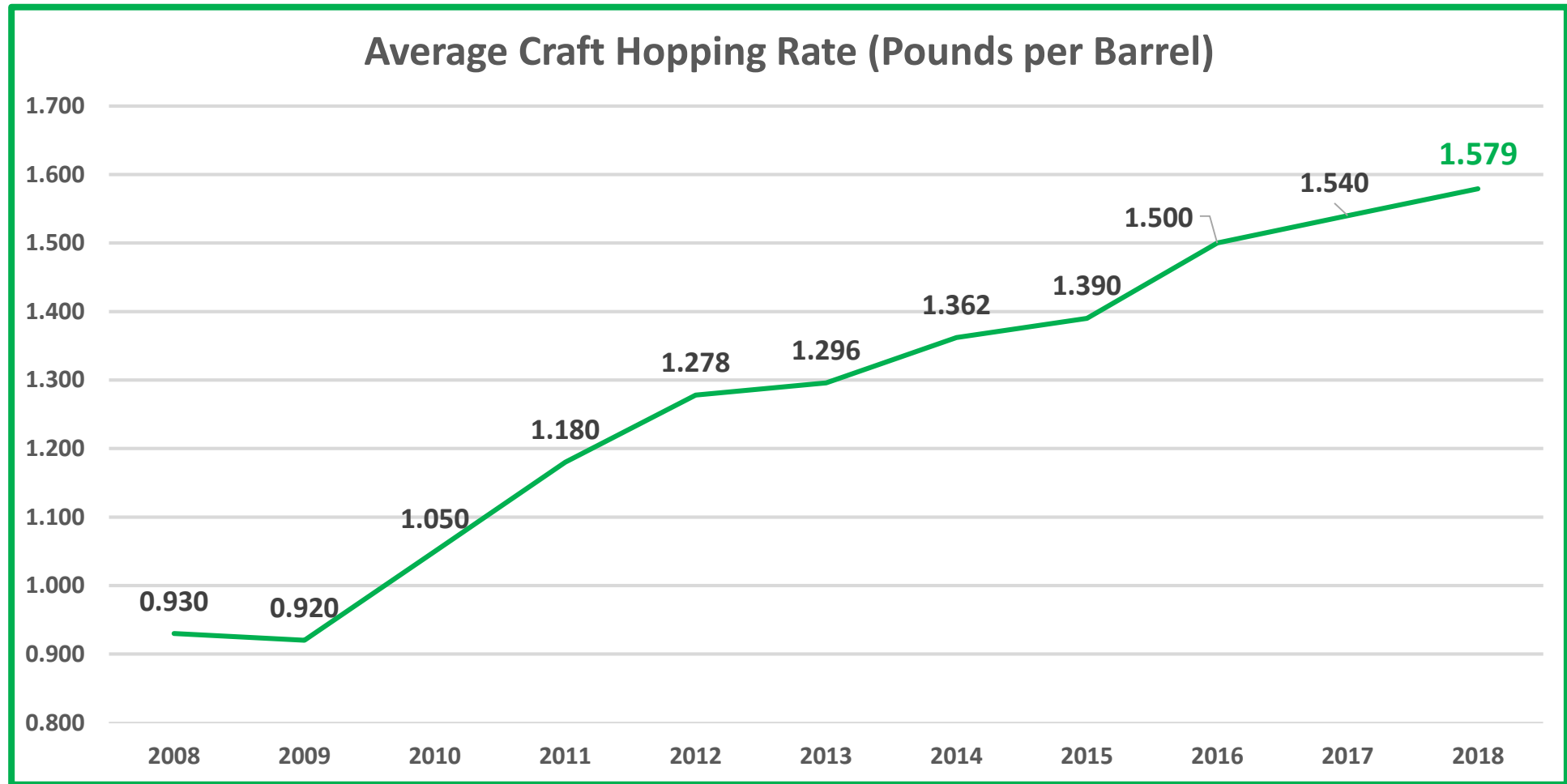
2018 Hop Survey Results Summary (Con.)

- U.S. craft brewers remain loyal to U.S. varieties at **85%** of total pounds
- Shortfalls measured In 2017 in different varieties from 2016
- Galaxy repeats as highest Impact imported variety
- Hop Cost Per Barrel Continues to Increase Sharply
- Proportion of US 2017 crop consumed by craft decreased
- Contracting rates have declined to pre-2007 shortage levels: **63% overall, and 45% among brewers < 2,500 bbls**

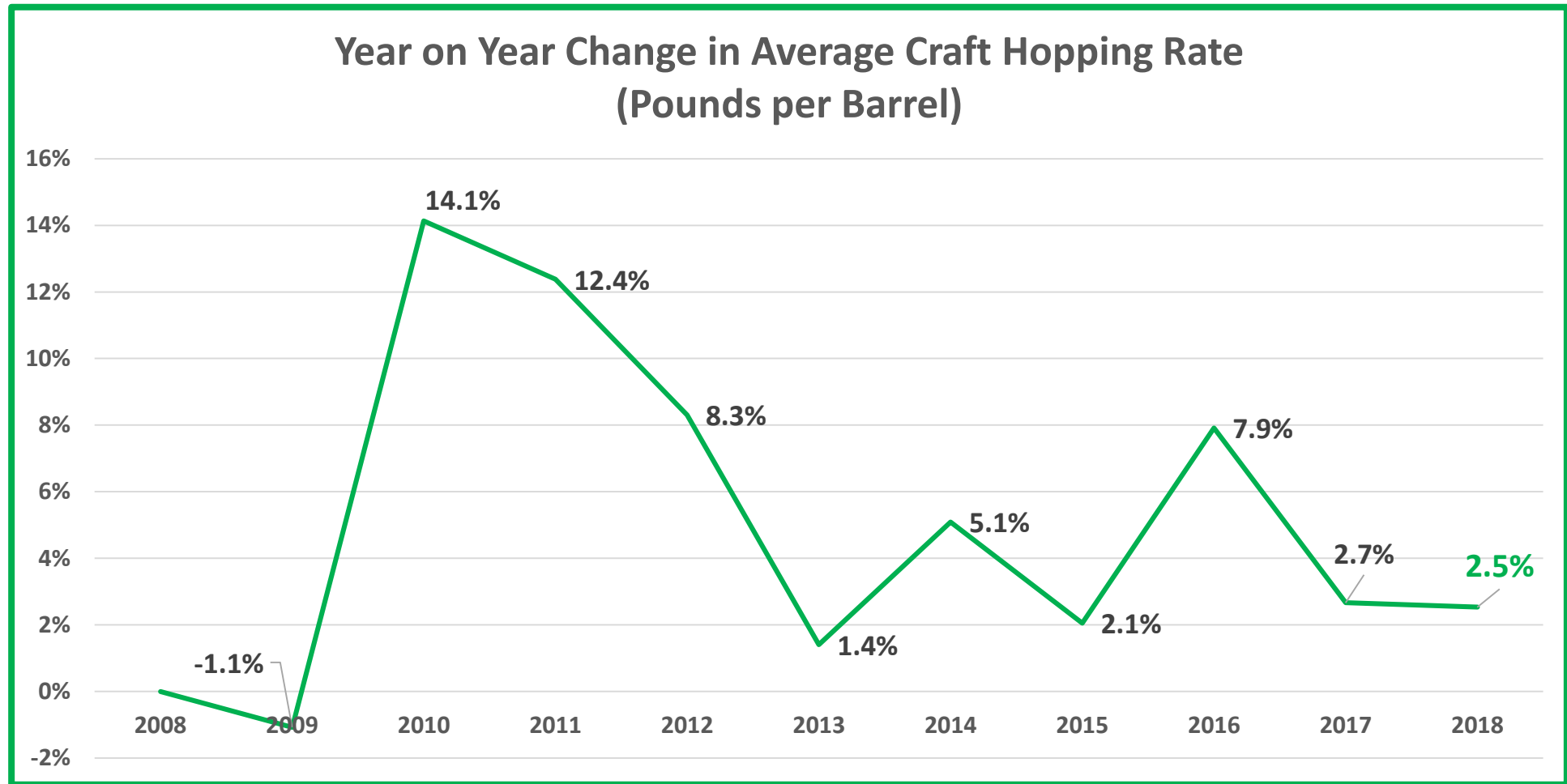
2018 Hop Survey Results



2018 Hop Survey Results



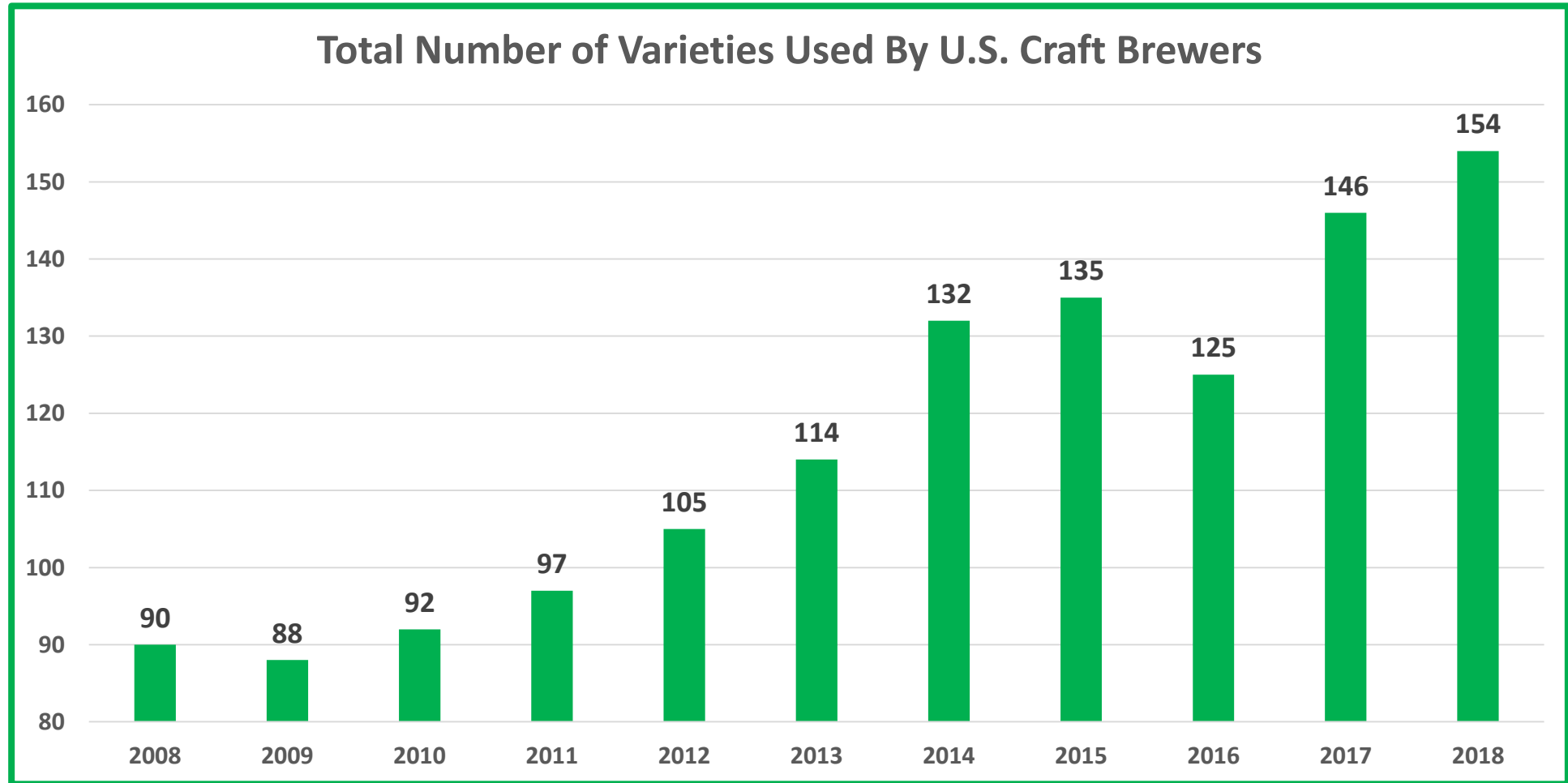
2018 Hop Survey Results



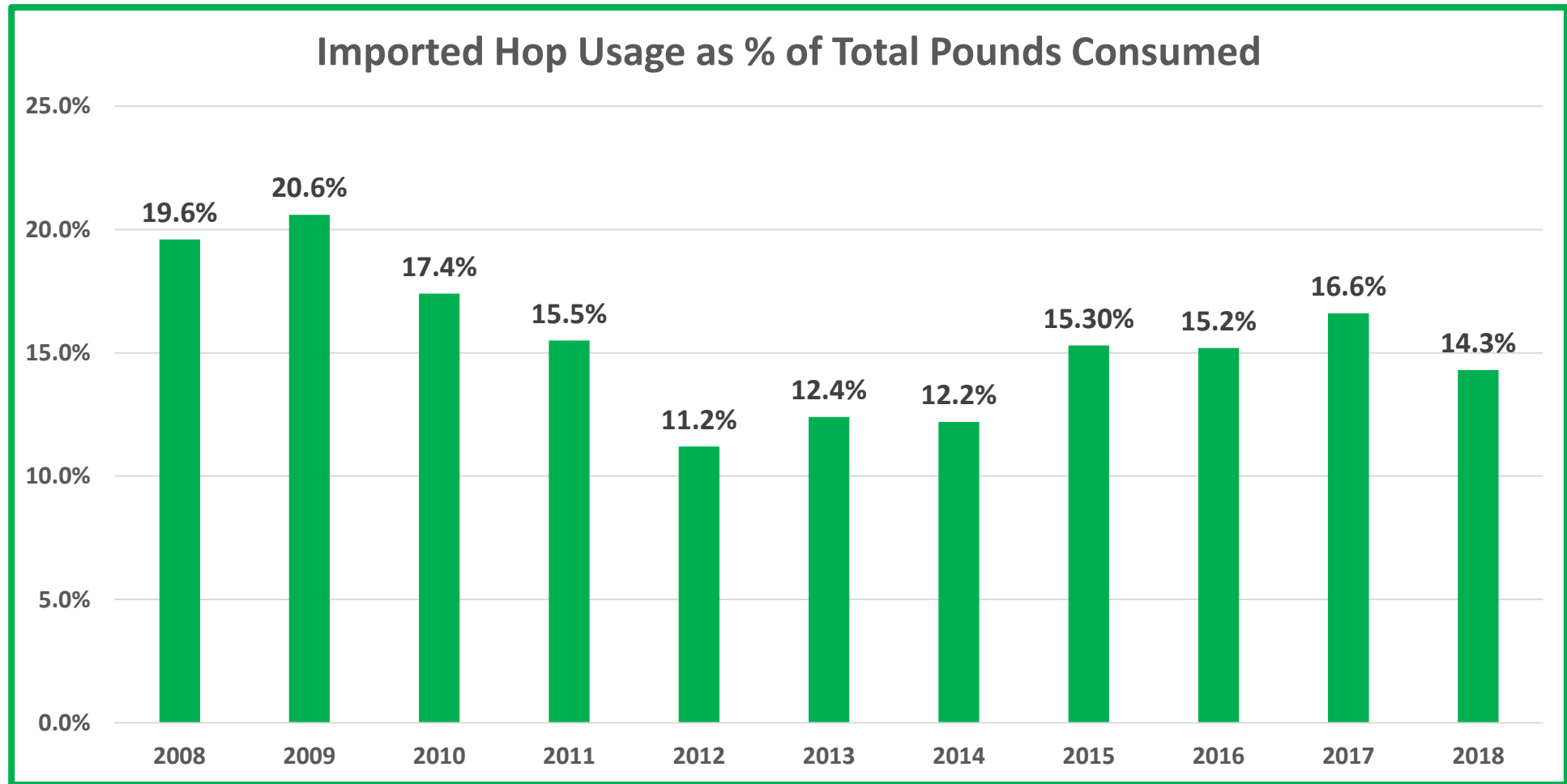
2018 Hop Survey Results

2012	2013	2014	2015	2016	2017	2018	Survey Yr
2011	2012	2013	2014	2015	2016	2017	Production Yr
Cascade	Cascade	Cascade	Cascade	Cascade	Cascade	Cascade	
Centennial	Centennial	Centennial	Centennial	Centennial	Centennial	Centennial	←
Chinook	Chinook	Simcoe	Chinook	Chinook	Chinook	Citra	←
Willamette	CTZ	Chinook	Simcoe	Simcoe	Simcoe	Mosaic	
Simcoe	Simcoe	CTZ	Citra	Citra	Crystal	Simcoe	
CTZ	Amarillo	Amarillo	Hall Mitt (Ger)	Amarillo	Citra	Chinook	←
US Golding	Crystal	Crystal	Amarillo	Mosaic	Nugget	Amarillo	
Crystal	Willamette	Willamette	Crystal	Crystal	Amarillo	CTZ	
Amarillo	Saaz (CZ)	Citra	Magnum (Ger)	Hall Mitt (Ger)	Mosaic	Crystal	
Ahtanum	US Golding	Saaz (CZ)	CTZ	CTZ	Magnum (Ger)	El Dorado	←

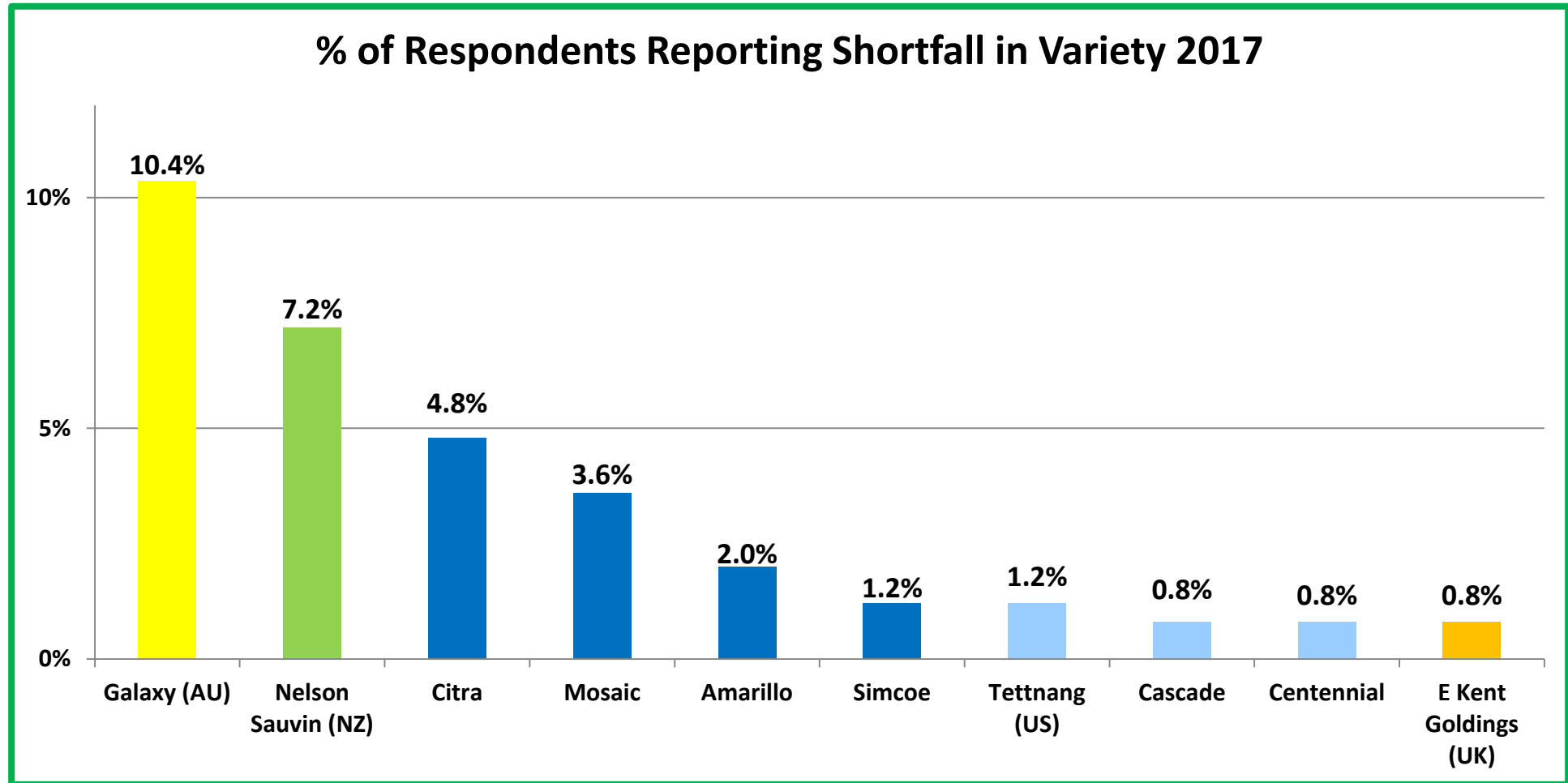
2018 Hop Survey Results



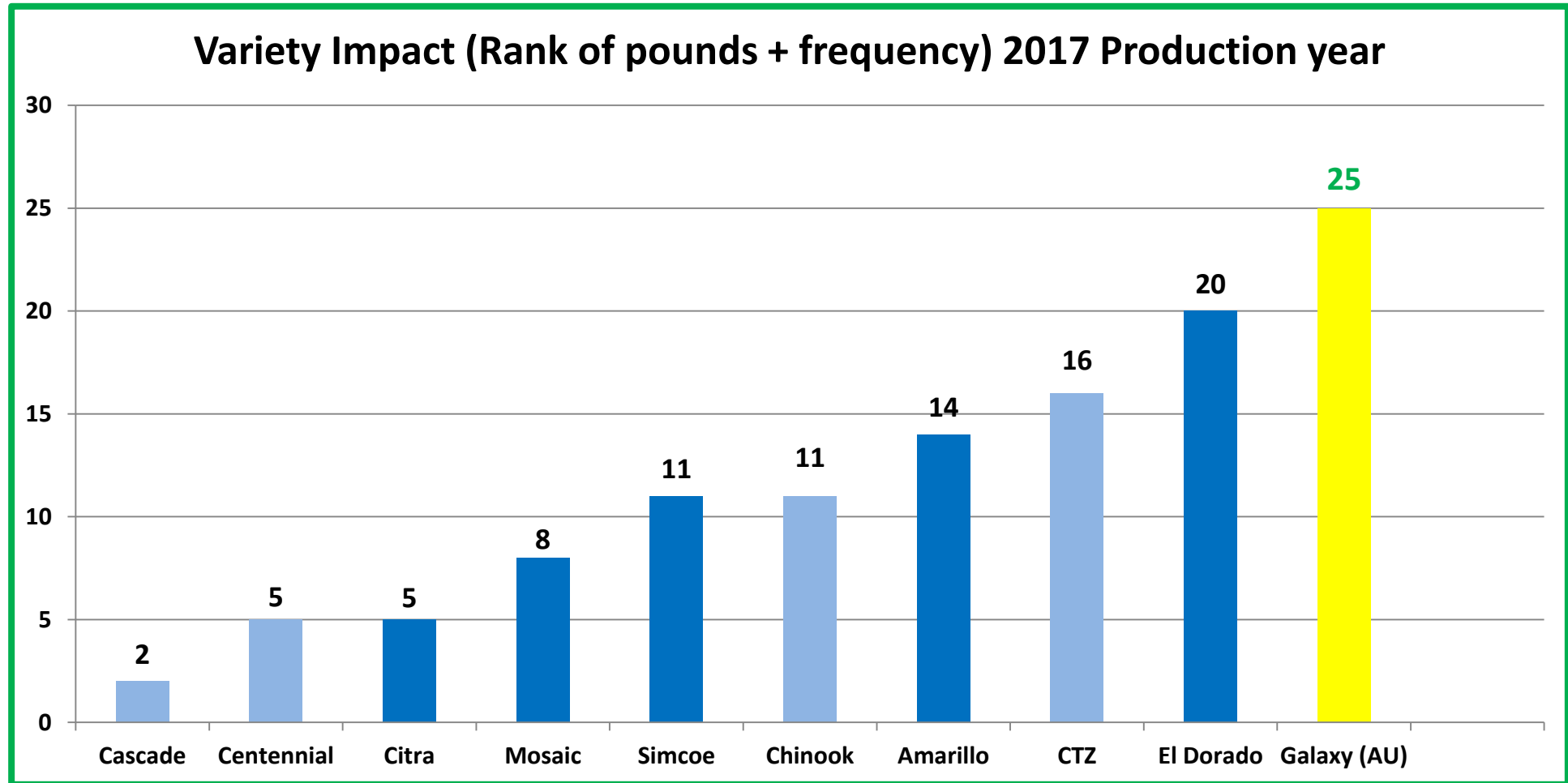
2018 Hop Survey Results



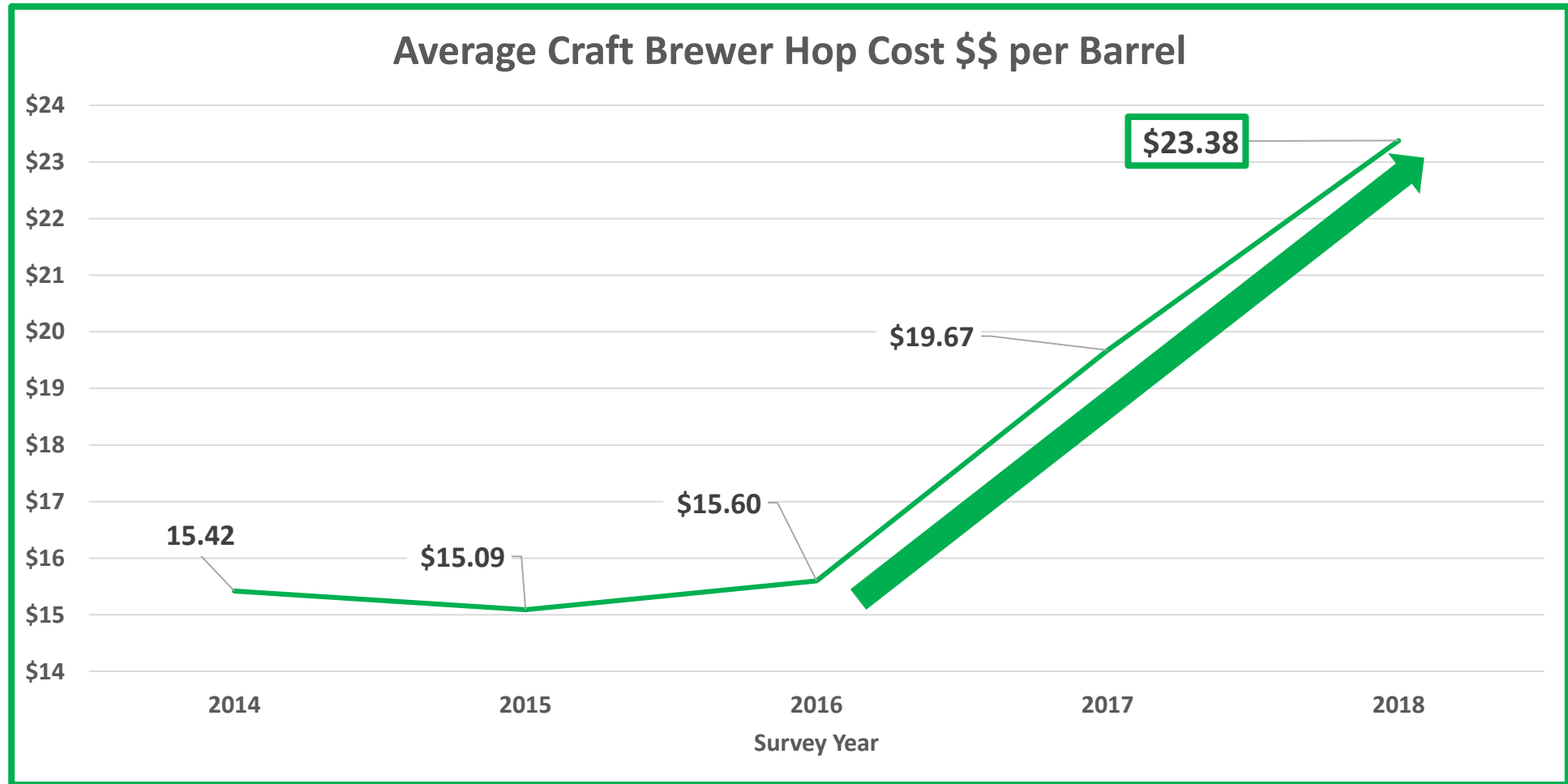
2018 Hop Survey Results



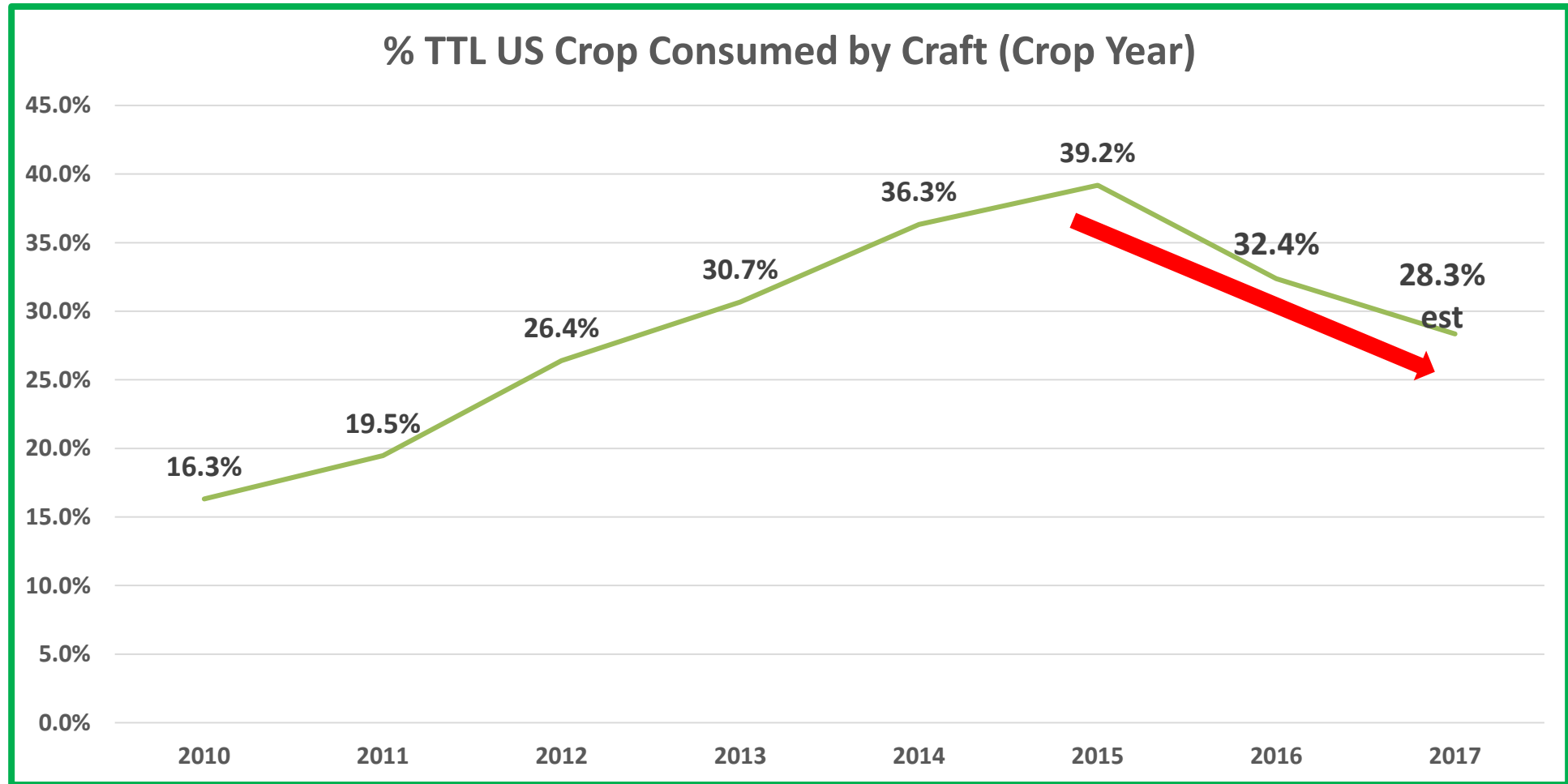
2018 Hop Survey Results



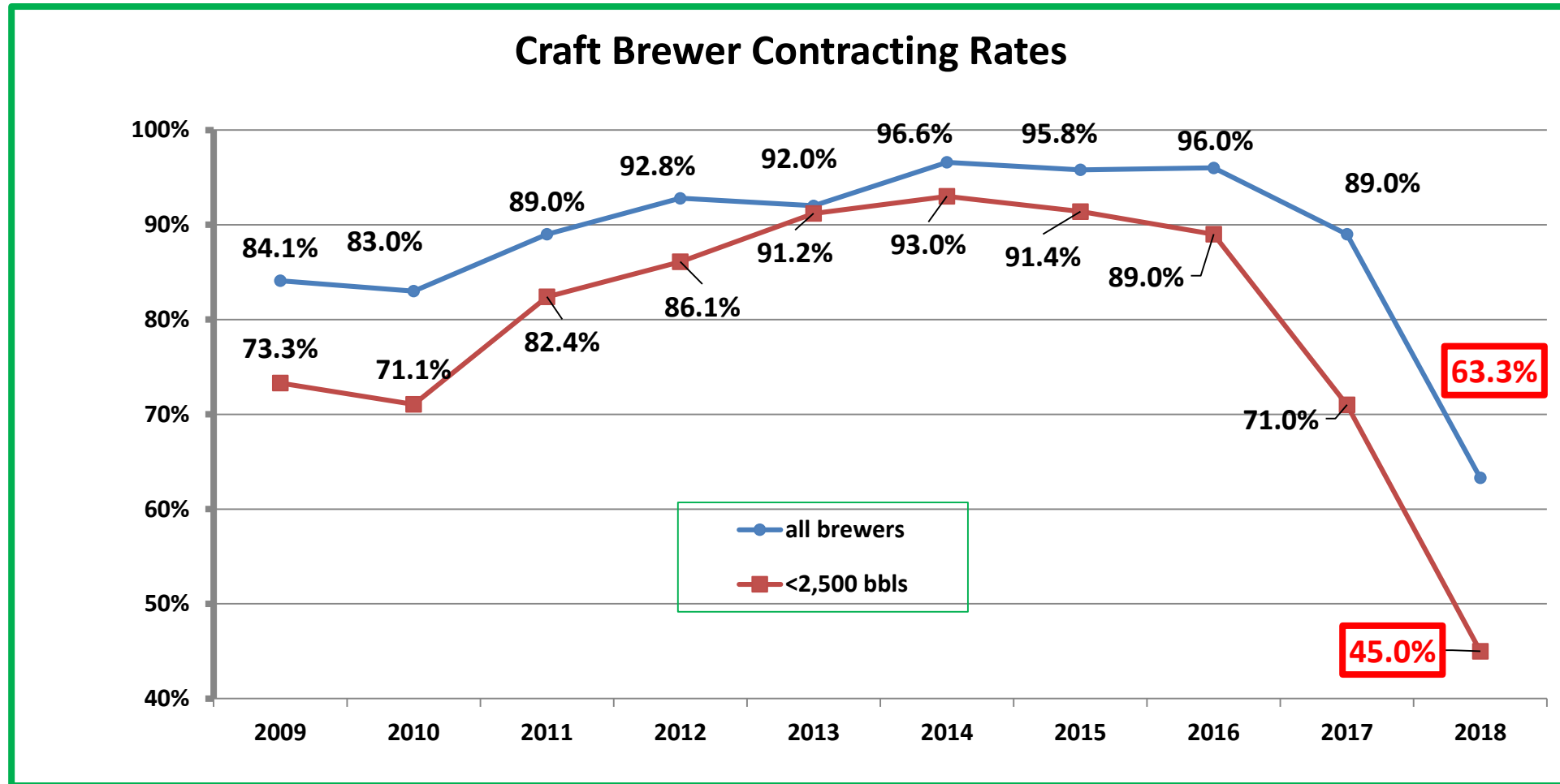
2018 Hop Survey Results



2018 Hop Survey Results



2018 Hop Survey Results



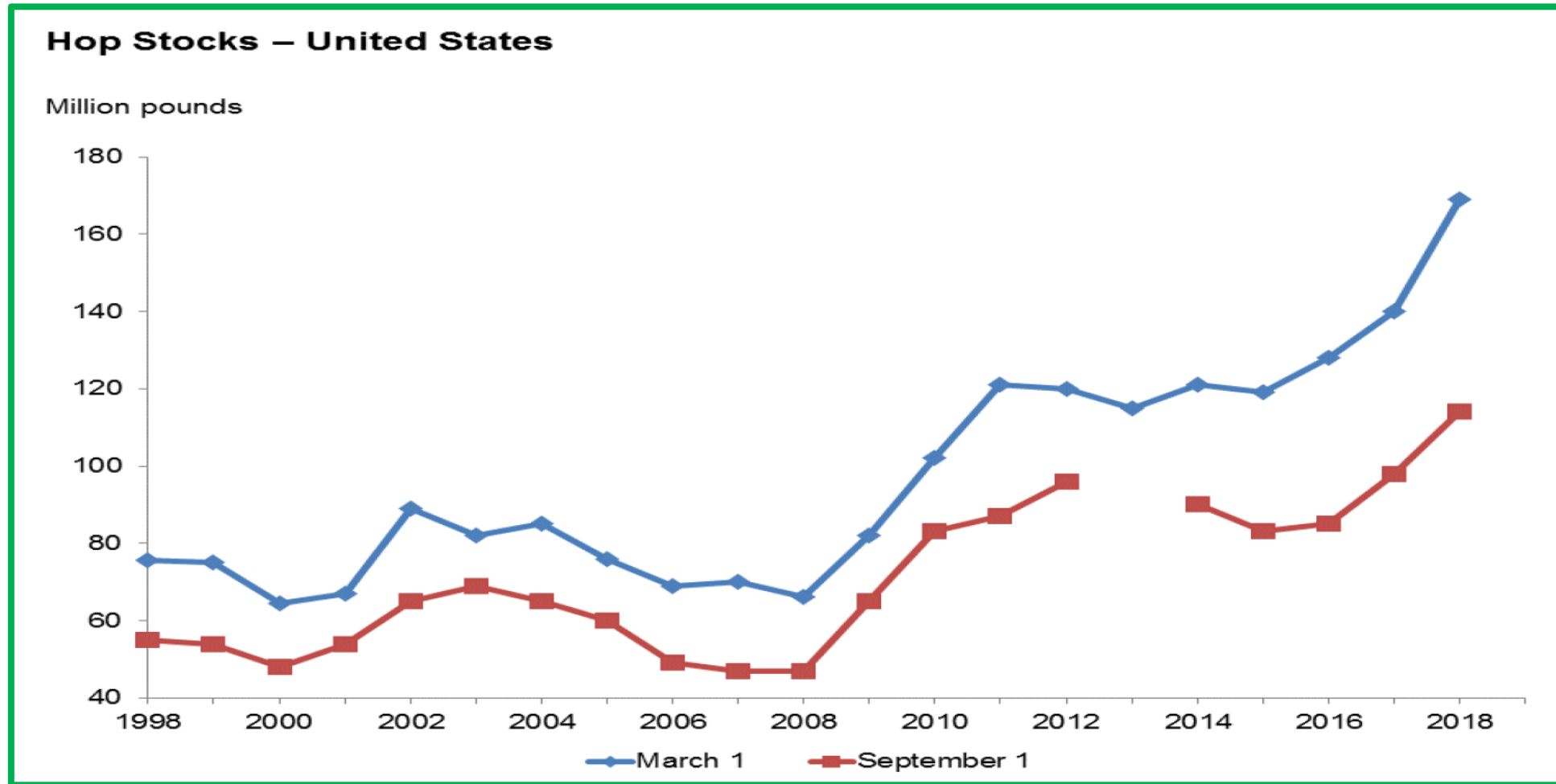
2018 Hop Stocks Analysis

+2350	Craft and Medium User Growth in 2016 (assume all aroma, 7% craft volume growth)
+1460	Net Export Growth of +2.5 MM pounds at 1713 pounds per acre (assume mix of aroma and alpha exports, no yield change)
-4054	Surplus Acres Carried Into 2017 (assume all aroma)
-244	Total Net New Acres Needed
~5000 ??	Potential Planned New Acres (assumes 1500 ID, 1500 OR, 2000 WA)
5244	Surplus 2017 Acres (alpha AND aroma)

2018 Hop Stocks Analysis

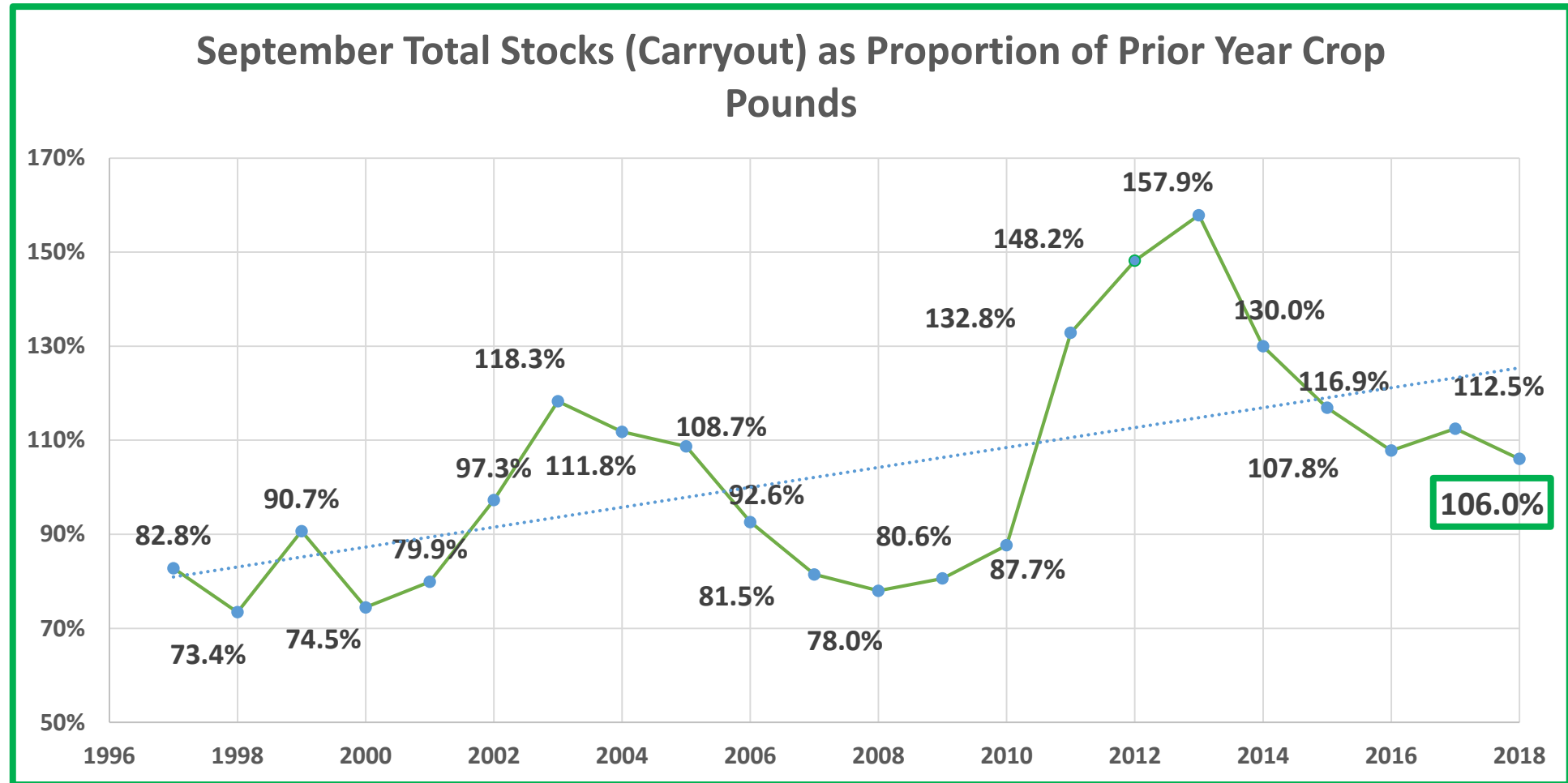
+1680	5% craft volume growth
+1275	Net Export Growth of +2.5 MM pounds at 1959 pounds per acre (assume mix of aroma and alpha exports, no yield change)
-4054	Surplus Acres Carried Into 2017 (assume all aroma)
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-1100	Total Net New Acres Needed
3500	2017 New US Acres
4600	Surplus 2017 Acres (alpha AND aroma)

2018 Hop Stocks Analysis



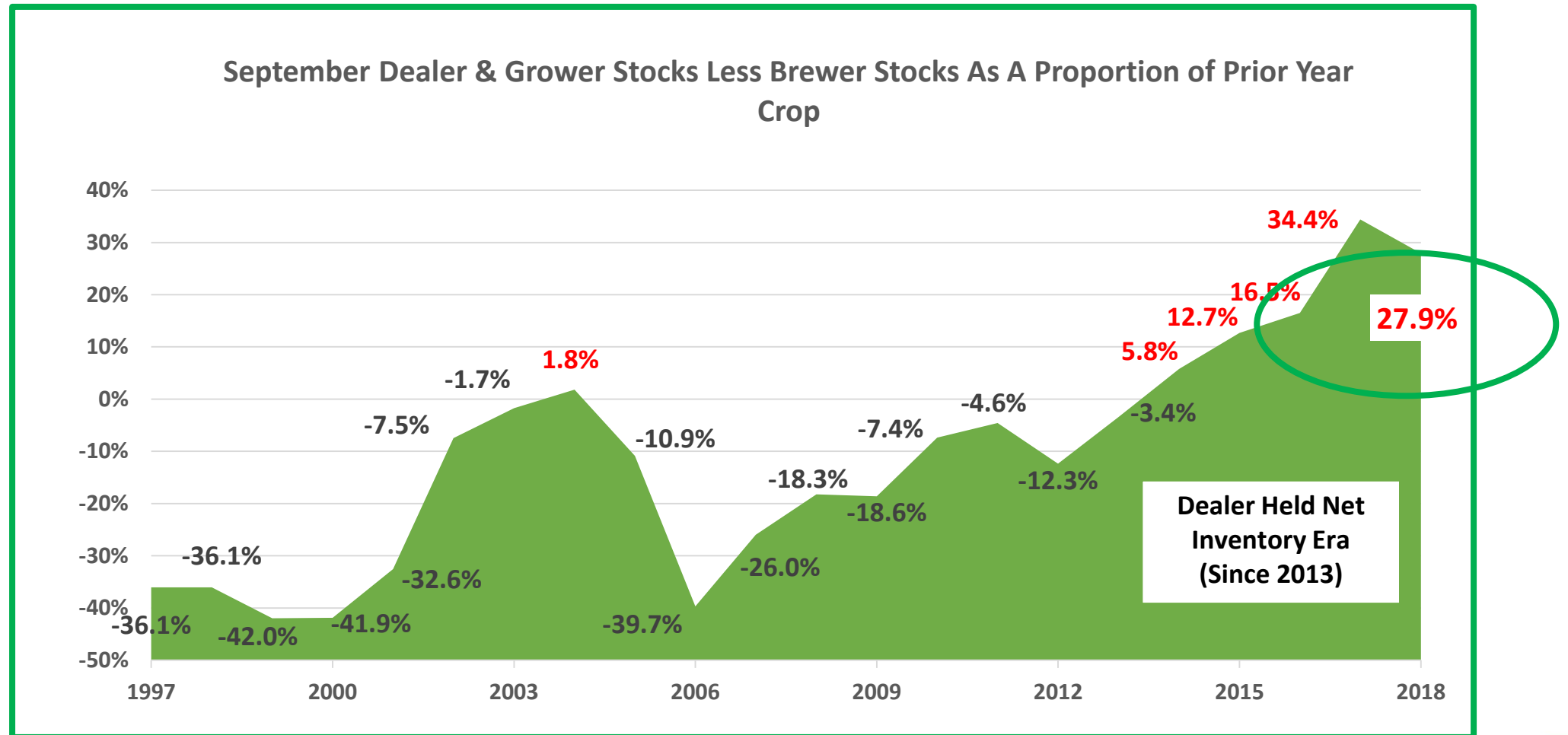
Source: USDA-NASS 2018 Hop Stocks Report

2018 Hop Stocks Analysis



Data Source: USDA-NASS 2018 Hop Stocks Report

2018 Hop Stocks Analysis



Data Source: USDA-NASS 2018 Hop Stocks Report

Federal Affairs Policy Efforts

Fiscal Year	2017	2018	2019	2020
Public Hop Research Program Support	\$0.8 MM Discretionary	\$1.8 MM Appropriated	\$1.8 MM Appropriated	??
Public Hop Researchers	1.7 FTE	2.0 FTE	3.0 Perm FTE / 1.0 Temp	3.0 Perm FTE / 1.0 Temp
Farm Bill Items	None	None	Crop Insurance; PM & DM Research	Crop Insurance; PM & DM Research
Excise Tax Reduction: Craft Beverage Modernization & Tax Reform Act	Bill	Law	Law	Permanent? Tax Increase?
Hops As Produce	Continued outreach with congress			

Federal Affairs Outreach



BARTH-HAASGROUP



Federal Affairs Outreach



Federal Affairs Outreach



International Ag Policy

COMITÉ INTERNATIONAL DE LA CULTURE DU HOUBLON INTERNATIONAL HOP GROWERS' CONVENTION - INTERNATIONALES HOPFENBAUBÜRO



Resolution

Nuremberg, 12 November 2018

The International Hop Growers' Convention (IHGC) represents 34 national hop producing associations and hop merchants' companies from 20 countries worldwide. Twelve of these members are located within the EU and produced over 50% of the world hop crop in 2018. The IHGC covers various aspects of the hop industry, but one of the main objectives is to secure plant protection products focused on Integrated Pest Management (IPM), to keep economical, safety and environmental issues in balance while providing the customers in the brewing industry with a safe and high quality ingredient.

Grants and Research Funding Update

Years	2015 - 2018
Competitive Research Grants	\$778,144
HGA Sponsorships and Projects	\$26,500
HRC Dues & Growout Funds	\$154,205
USDA Breeding Program	\$588,637
Total Hop Industry Support	\$1,547,486

Public Breeding Sensory Update



A close-up photograph of two hands wearing black gloves clinking two glasses of beer. The glass on the left contains a light yellow beer, and the glass on the right contains a darker, reddish-brown beer. Both glasses have a thick head of white foam. The background is a blurred, dark blue-grey color.

CHEERS!