



2017

STATISTICAL REPORT

RELEASED JANUARY 2018

PRESENTED BY
HOP GROWERS OF AMERICA



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Conversions used while compiling
the data presented in this document:

1 hectare = 2.4711 acres
1 acre = 0.404686 hectares
1 kilogram = 2.2046 pounds
1 pound = 0.4536 kilograms
1 metric tonne = 2204.6 pounds
1 hectoliter = 26.417 gallons
1 zentner = 110.23 pounds

Editor's Note: For 2017 the North American Hop Acreage chart on pages 4-5 has been enhanced to include estimates for 26 additional states and 7 Canadian provinces, in addition to the three Pacific Northwest states where commercial hops have traditionally been grown. Data for Oregon, Washington and Idaho were provided by the USDA-NASS from annual grower surveys. Estimates for the remaining states were provided to Hop Growers of America by a network of growers, researchers, Extension specialists, brewers, and hop marketers. Special thanks to members of the Great Lakes Hop Working Group and Hop Growers of America Small Grower Council for their assistance in estimating acreage for many of these additional states.

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EXECUTIVE SUMMARY

As brewers continued to demand aroma hops, acreage increased again this year, although the growth rate slowed to 4.77%. With fewer “baby” hops and favorable weather conditions, average yield per acre jumped to 1,959 pounds per acre, a 14% improvement over 2016. The resulting 2017 US hop harvest saw a 20% increase over 2016, breaking the 100 million pound mark for the first time in history.

Another notable “first” occurred in 2017 with Idaho hop production exceeding Oregon for the first time. Washington production represented 75.4% of the Pacific Northwest, followed by Idaho with 13.2% and Oregon with 11.4%. The remaining 26 states reporting commercial hop production on an estimated 2,504 acres. Estimating an average of 750 pounds per acre contributed another 1,875,000 pounds to the US crop total. USDA-NASS does not conduct hop surveys outside of the Pacific Northwest, so Hop Growers of America relies on a network of growers, associations, Extension specialists, and other points of contact to compile estimates.

Since 2012 (6 years) US hop acreage has increased 79.5%. During that period the variety balance has shifted from roughly 50-50 alpha and aroma/dual purpose hops in 2012 to 80% aroma/dual purpose varieties in 2017. The **Top 10 PNW Hop Varieties** following:

Rank	2013	2014	2015	2016	2017
1	Cascade	Cascade	Cascade	Cascade	Cascade
2	Zeus	Zeus	Centennial	Centennial	Centennial
3	Summit	Centennial	Zeus	Citra®, HBC 394	Citra®, HBC 394
4	Columbus/Tomahawk	Summit	Simcoe®, YCR 14	Simcoe®, YCR 14	Simcoe®, YCR 14
5	Centennial	Simcoe®, YCR 14	Citra®, HBC 394	Zeus	Zeus
6	Nugget	Citra®, HBC 394	Mosaic®, HBC 369	Mosaic®, HBC 369	Mosaic®, HBC 369
7	Chinook	Columbus/Tomahawk	Chinook	Chinook	Chinook
8	Citra®, HBC 394	Chinook	Columbus/Tomahawk	Summit	Willamette
9	Simcoe®, YCR 14	Nugget	Summit	Willamette	Summit
10	Super Galena™	Willamette	Willamette	Columbus/Tomahawk	Columbus/Tomahawk

Increased acreage and customer demands have driven increases in the cost of production, including expansion of harvesting and production capacity, updating equipment, support of proprietary hop breeding programs through royalties and other contributions, increased labor costs (including health care and other benefits), etc. Administrative and operating costs associated with food safety, sustainability and best practices compliance and other customer requirements have also increased. Lower yielding varieties must be priced higher to maintain a consistent gross income per acre. The 2015 Washington State University PNW Hop Cost of Production Study estimated the annual cost of producing standard trellis hops under drip irrigation in the PNW at \$9,806 per acre (including fixed costs) – see <https://www.usahops.org/growers/cost-of-production.html>. Applying a 5% annual inflation factor resulted in **average cost of production of \$10,811 per acre in 2017**. These estimates would result in an **average profit of \$785 per acre** for PNW hop farmers in 2017.

Year	PNW Acres Harvested	PNW Production (pounds)	Yield	Value of Production (\$1,000)	Gross Return per acre*
2010	31,289	65,492,600	2,093	\$214,589	\$6,858
2011	29,787	64,781,600	2,175	\$203,378	\$6,828
2012	29,683	58,911,400	1,985	\$186,876	\$6,296
2013	35,288	69,246,100	1,962	\$232,308	\$6,583
2014	38,011	70,995,900	1,868	\$260,627	\$6,857
2015	43,633	78,846,000	1,807	\$345,388	\$7,916
2016	50,857	87,139,600	1,713	\$498,420	\$9,800
2017	53,282	104,366,000	1,959	\$617,836	\$11,596

* Gross return per acre before deducting production costs.

Source: USDA-NASS, prepared by HGA.

NORTH AMERICAN HOP ACREAGE BY STATE/PROVINCE AND VARIETY (FIVE YEARS)

STATE/PROVINCE & VARIETY	ACRES HARVESTED					2016-17 % +/-
	2013	2014	2015	2016	2017	
ARIZONA	*	*	1.0	1.0	1.0	0.00%
CALIFORNIA	*	65.0	85.0	130.0	130.0	0.00%
COLORADO	*	*	125.0	200.0	200.0	0.00%
CONNECTICUT	*	*	*	15.0	15.0	
IDAHO #						
Amarillo®, VGXP01	*	*	*	*	983.0	
Apollo™	291.0	285.0	286.0	235.0	228.0	-2.98%
Bravo™	136.0	126.0	166.0	151.0	149.0	-1.32%
Calypso	*	*	81.0	81.0	81.0	0.00%
Cascade	628.0	821.0	770.0	788.0	882.0	11.93%
Centennial	57.0	74.0	*	*	225.0	
Chinook	324.0	344.0	358.0	418.0	669.0	60.05%
Citra®, HBC 394	19.0	91.0	412.0	576.0	759.0	31.77%
Crystal	*	29.0	*	123.0	182.0	47.97%
El Dorado®	14.0	63.0	205.0	227.0	219.0	-3.52%
Mosaic®, HBC 369	*	*	272.0	496.0	500.0	0.81%
Simcoe®, YCR 14	*	67.0	199.0	232.0	394.0	69.83%
Super Galena™	275.0	161.0	92.0	69.0	*	
Willamette	*	*	*	*	128.0	
Zeus	548.0	662.0	661.0	580.0	1,011.0	74.31%
Experimental	5.0	41.0	72.0	9.0	26.0	188.89%
Other Varieties	1,059.0	979.0	1,289.0	1,663.0	557.0	-66.51%
TOTAL IDAHO #	3,356.0	3,743.0	4,863.0	5,648.0	6,993.0	23.81%
ILLINOIS	*	10.0	30.0	30.0	30.0	0.00%
INDIANA	*	8.0	25.0	50.0	50.0	0.00%
IOWA	*	*	30.0	40.0	60.0	50.00%
KENTUCKY	*	*	*	20.0	30.0	
MAINE	*	10.0	11.5	24.0	24.0	0.00%
MARYLAND	*	*	15.0	15.0	20.0	33.33%
MASSACHUSETTS	*	*	*	25.0	25.0	
MICHIGAN	*	300.0	320.0	650.0	810.0	24.62%
MINNESOTA	*	20.0	26.0	73.0	120.0	64.38%
MONTANA	*	1.0	1.0	12.0	17.0	41.67%
NEBRASKA	*	12.0	17.0	24.0	39.0	62.50%
NEW HAMPSHIRE	*	*	*	2.0	2.0	
NEW JERSEY	*	*	*	15.0	15.0	
NEW YORK	*	150.0	250.0	300.0	400.0	33.33%
NORTH CAROLINA	*	30.0	40.0	30.0	30.0	0.00%
NORTH DAKOTA	*	*	*	2.0	2.0	
OHIO	*	30.0	50.0	70.0	70.0	0.00%
OREGON #						
Cascade	423.0	961.0	1,085.0	1,211.0	1,167.0	-3.63%
Centennial	249.0	443.0	631.0	723.0	739.0	2.21%
Chinook	*	*	129.0	107.0	124.0	15.89%
Citra®, HBC 394	*	*	246.0	654.0	716.0	9.48%
Crystal	*	*	377.0	423.0	382.0	-9.69%
Fuggle	91.0	*	85.0	141.0	86.0	-39.01%
Golding	194.0	234.0	238.0	*	215.0	
Liberty	*	*	210.0	*	*	
Magnum	104.0	176.0	199.0	151.0	47.0	-68.87%
Mosaic®, HBC 369	*	*	*	*	337.0	
Mt. Hood	221.0	269.0	288.0	324.0	318.0	-1.85%
Nugget	1,667.0	1,363.0	1,484.0	1,460.0	1,367.0	-6.37%
Perle	55.0	100.0	*	*	76.0	
Simcoe®, YCR 14	*	*	191.0	330.0	461.0	39.70%
Sterling	122.0	130.0	209.0	228.0	227.0	-0.44%
Super Galena™	204.0	125.0	82.0	*	67.0	
Tettnanger	*	*	133.0	122.0	72.0	-40.98%
Willamette	553.0	564.0	661.0	833.0	832.0	-0.12%
Experimental	35.0	*	*	*	*	
Other Varieties	917.0	1,045.0	364.0	1,058.0	618.0	-41.59%
TOTAL OREGON #	4,835.0	5,410.0	6,612.0	7,765.0	7,851.0	1.11%
PENNSYLVANIA	*	*	5.5	15.0	20.0	33.33%
RHODE ISLAND	*	*	*	10.0	10.0	
VERMONT	*	25.0	45.0	25.0	25.0	0.00%
VIRGINIA	*	25.0	30.0	30.0	30.0	0.00%

STATE/PROVINCE & VARIETY	ACRES HARVESTED					2016-17
	2013	2014	2015	2016	2017	% +/-
WASHINGTON #						
Amarillo®, VGXP01	*	*	*	*	1,984.0	
Azacca™, ADHA-483	*	79.0	175.0	506.0	578.0	14.23%
Ahtanum™	211.0	194.0	145.0	155.0	371.0	139.35%
Apollo™	701.0	700.0	708.0	735.0	684.0	-6.94%
Bravo™	493.0	584.0	569.0	573.0	486.0	-15.18%
Cascade	4,237.0	4,837.0	4,935.0	5,582.0	4,896.0	-12.29%
Centennial	1,869.0	2,836.0	3,770.0	4,359.0	4,305.0	-1.24%
Chinook	1,415.0	1,297.0	1,300.0	1,415.0	1,632.0	15.34%
Citra®, HBC 394	1,296.0	1,670.0	2,335.0	3,264.0	3,645.0	11.67%
Cluster	802.0	728.0	666.0	623.0	621.0	-0.32%
Columbus/Tomahawk®	2,336.0	1,738.0	1,673.0	1,416.0	1,659.0	17.16%
Comet	*	*	108.0	163.0	205.0	25.77%
Crystal	214.0	181.0	131.0	191.0	122.0	-36.13%
Ekuanot™, HBC 366	*	*	*	*	890.0	
El Dorado®	82.0	82.0	243.0	396.0	463.0	16.92%
Eureka!™	*	*	*	*	362.0	
Galena	440.0	306.0	295.0	262.0	378.0	44.27%
Glacier	98.0	126.0	155.0	145.0	*	
Golding	105.0	94.0	53.0	*	*	
Jarrylo™, ADHA-881	*	75.0	122.0	131.0	*	
Loral™, HBC 291	*	*	*	*	186.0	
Magnum	*	*	108.0	*	*	
Millennium	420.0	113.0	*	*	*	
Mosaic®, HBC 369	382.0	671.0	1,528.0	2,029.0	1,877.0	-7.49%
Mt. Hood	168.0	150.0	130.0	88.0	87.0	-1.14%
Northern Brewer	170.0	131.0	123.0	*	*	
Nugget	395.0	265.0	202.0	186.0	125.0	-32.80%
Palisade®, YCR-4	132.0	223.0	454.0	580.0	571.0	-1.55%
Simcoe®, YCR 14	1,298.0	1,819.0	2,916.0	3,769.0	3,753.0	-0.42%
Summit™	2,844.0	2,522.0	1,620.0	1,769.0	1,617.0	-8.59%
Super Galena™	771.0	606.0	351.0	310.0	435.0	40.32%
Tahoma	*	*	*	*	217.0	
Tettnanger	95.0	*	*	*	38.0	
Vanguard	76.0	58.0	84.0	*	*	
Warrior®, YCR-5	180.0	192.0	*	*	*	
Willamette	522.0	595.0	698.0	728.0	571.0	-21.57%
Zeus	3,277.0	3,375.0	2,989.0	2,502.0	2,214.0	-11.51%
Experimental	258.0	392.0	316.0	567.0	421.0	-25.75%
Other	1,810.0	2,219.0	3,256.0	5,000.0	3,045.0	-39.10%
TOTAL WASHINGTON #	27,097.0	28,858.0	32,158.0	37,444.0	38,438.0	2.65%
WISCONSIN	*	120.0	170.0	297.0	297.0	0.00%
TOTAL PACIFIC NORTHWEST	35,288.0	38,011.0	43,633.0	50,857.0	53,282.0	4.77%
TOTAL NON-PNW US	*	881.0	1,277.0	2,106.0	2,503.5	18.87%
TOTAL UNITED STATES	35,288.0	38,892.0	44,910.0	52,963.0	55,785.5	5.33%
BRITISH COLUMBIA			79.0	79.0	79.0	0.00%
MANITOBA			5.0	5.0	5.0	0.00%
NEW BRUNSWICK			20.0	20.0	20.0	0.00%
NOVA SCOTIA			15.0	15.0	15.0	0.00%
ONTARIO			60.0	90.0	175.0	94.44%
PRINCE EDWARD ISLAND			7.5	7.5	7.5	0.00%
QUEBEC			70.0	123.0	123.0	0.00%
TOTAL CANADA			256.5	339.5	424.5	25.04%
TOTAL NORTH AMERICA	35,288.0	38,892.0	45,166.5	53,302.5	56,210.0	5.45%

SOURCE: USDA-NASS (for Idaho, Oregon and Washington) and Hop Growers of America (for remaining state estimates). Prepared by HGA.

¹ Prior to 2013, only State totals were published for Idaho to avoid disclosure of individual operations.

² "Other Varieties" includes data to avoid disclosure of individual operations.

HOP YIELDS BY STATE AND VARIETY (FIVE YEARS)

STATE & VARIETY	YIELDS (POUNDS PER ACRE)					2016-17
	2013	2014	2015	2016	2017	% +/-
IDAHO						
Amarillo [®] , VGXP01	*	*	*	*	1,569	
Apollo [™]	2,230	2,004	2,062	1,893	1,798	-5.02%
Bravo [™]	2,430	2,579	2,625	2,359	2,799	18.65%
Calypso [™]	*	*	1,710	1,937	2,159	11.46%
Cascade	1,224	1,746	1,633	1,585	1,771	11.74%
Centennial	1,004	754	*	*	2,028	
Chinook	1,801	1,673	1,850	1,712	1,665	-2.75%
Citra [®] , HBC 394	1,011	1,200	1,271	1,213	1,657	36.60%
Crystal	*	2,186	*	1,678	2,084	24.20%
El Dorado [®]	971	1,144	1,125	1,658	2,163	30.46%
Mosaic [®] , HBC 369	*	*	2,278	2,204	2,581	17.11%
Simcoe [®] , YCR 14	*	969	1,576	1,335	1,494	11.91%
Super Galena [™]	2,201	2,165	2,189	1,872	*	
Willamette	*	*	*	*	1,689	
Zeus	3,049	2,891	2,909	2,761	2,756	-0.18%
Experimental	2,800	1,366	1,269	1,000	611	-38.90%
Other Varieties ²	1,063	1,354	1,348	1,174	1,929	64.31%
Total Idaho ¹	1,740	1,847	1,794	1,646	1,968	19.56%
OREGON						
Cascade	1,483	1,402	1,994	1,597	1,425	-10.77%
Centennial	1,585	1,095	1,352	1,235	1,273	3.08%
Chinook	*	*	1,861	1,675	1,667	-0.48%
Citra [®] , HBC 394	*	*	980	1,047	1,475	40.88%
Crystal	*	*	2,011	2,216	1,772	-20.04%
Fuggle	827	*	1,066	1,021	1,251	22.53%
Golding	1,148	955	837	*	1,181	
Liberty	*	*	1,360	*	*	
Magnum	1,406	1,077	1,572	1,493	1,714	14.80%
Mosaic [®] , HBC 369	*	*	*	*	1,875	
Mt. Hood	1,567	1,450	1,276	1,463	1,439	-1.64%
Nugget	2,053	1,978	1,888	1,925	1,820	-5.45%
Perle	1,178	1,057	*	*	1,164	
Simcoe [®] , YCR 14	*	*	1,678	1,969	1,421	-27.83%
Sterling	1,621	1,423	1,344	1,626	1,407	-13.47%
Super Galena [™]	1,852	2,309	2,340	*	2,096	
Tettnanger	*	*	1,242	1,193	1,013	
Willamette	1,491	1,453	1,226	1,573	1,324	-15.83%
Experimental	1,734	*	*	*	*	*
Other Varieties ²	1,931	1,426	1,609	1,546	1,573	1.75%
Total Oregon	1,764	1,520	1,613	1,596	1,517	-4.95%
WASHINGTON						
Azacca [™] , ADHA-483	*	1,704	1,872	1,870	2,463	31.71%
Ahtanum [™] , YCR 1	1,647	1,680	1,557	1,012	1,052	3.95%
Amarillo [®] , VGXP01	*	*	*	*	1,687	
Apollo [™]	2,926	2,649	2,738	2,225	2,729	22.65%
Bravo [™]	2,860	2,768	2,824	2,671	2,671	0.00%
Cascade	1,723	1,824	1,936	1,727	2,124	22.99%
Centennial	1,554	1,347	1,145	1,355	1,703	25.68%
Chinook	1,987	1,815	1,793	1,420	1,784	25.63%
Citra [®] , HBC 394	1,405	1,570	1,541	1,543	1,748	13.29%
Cluster	1,948	1,825	1,705	1,700	1,937	13.94%
Columbus/Tomahawk [®]	2,571	2,629	2,524	1,969	2,646	34.38%
Comet	*	*	1,780	949	1,855	95.47%
Crystal	1,286	1,366	1,183	1,475	2,063	39.86%
Ekuanot [™] , HBC 366	*	*	*	*	2,740	
El Dorado [®]	1,761	2,206	2,154	1,904	1,946	2.21%
Eureka! [™]	*	*	*	*	2,244	
Galena	1,969	1,801	1,968	1,692	2,134	26.12%
Glacier	1,258	1,202	996	1,168	*	
Golding	1,010	772	854	*	*	
(continued next page)						

STATE & VARIETY	YIELDS (POUNDS PER ACRE)					2016-17
	2013	2014	2015	2016	2017	% +/-
WASHINGTON cont.						
Jarrylo™, ADHA-881	*	1,548	1,541	1,408	*	
Loral™, HBC 291	*	*	*	*	2,295	
Magnum	*	*	1,255	*	*	
Millennium	2,266	1,996	*	*	*	
Mosaic®, HBC 369	1,709	2,225	2,036	2,326	2,439	4.86%
Mt. Hood	1,161	1,333	1,069	1,075	1,043	-2.98%
Northern Brewer	1,256	1,244	991	*	*	
Nugget	1,931	1,538	1,927	1,774	1,950	9.92%
Palisade®, YCR-4	2,790	2,469	1,950	2,228	2,209	-0.85%
Simcoe®, YCR 14	1,682	1,542	1,540	1,673	1,792	7.11%
Summit™	1,873	2,105	1,969	1,648	2,067	25.42%
Super Galena™	2,816	2,562	2,729	2,501	2,647	5.84%
Tahoma	*	*	*	*	1,752	
Tettnanger	755	*	*	*	1,202	
Vanguard	1,349	1,455	1,223	*	*	
Warrior®, YCR-5	2,169	1,821	*	*	*	
Willamette	1,240	1,130	1,007	1,277	1,446	13.23%
Zeus	2,940	2,811	2,819	2,469	3,088	25.07%
Experimental	1,562	1,625	1,545	1,592	1,901	19.41%
Other Varieties ²	1,697	1,418	1,603	1,662	1,746	5.05%
Total Washington	2,025	1,936	1,849	1,748	2,047	17.11%
Total Pacific Northwest	1,985	1,868	1,807	1,713	1,959	14.36%

SOURCE: USDA-NASS. Prepared by HGA. State and variety yields for production outside of the Pacific Northwest are not reported.

¹ Prior to 2013, only State totals published for Idaho to avoid disclosure of individual operations.

² "Other Varieties" includes data to avoid disclosure of individual operations.

HOP PRODUCTION BY STATE AND VARIETY (FIVE YEARS)

STATE/PROVINCE & VARIETY	HOP PRODUCTION (POUNDS)					2016-17
	2013	2014	2015	2016	2017	% +/-
IDAHO						
Amarillo®, VGXP01	*	*	*	*	1,542,300	
Apollo™	649,000	571,100	589,600	444,900	409,900	-7.87%
Bravo™	330,500	324,900	435,700	356,200	417,100	17.10%
Calypso	*	*	138,500	156,900	174,900	11.47%
Cascade	768,900	1,433,100	1,257,800	1,248,900	1,562,000	25.07%
Centennial	57,200	55,800	*	*	456,300	
Chinook	583,400	575,400	662,200	715,500	1,113,900	55.68%
Citra®, HBC 394	19,200	109,200	523,700	698,500	1,257,700	80.06%
Crystal	*	63,400	*	206,400	379,300	
El Dorado®	13,600	72,100	230,600	376,300	473,700	25.88%
Mosaic®, HBC 369	*	*	619,700	1,093,400	1,290,500	18.03%
Simcoe®, YCR 14	*	64,900	313,600	309,800	588,600	89.99%
Super Galena™	605,400	348,500	201,400	129,200	*	
Willamette	*	*	*	*	216,200	
Zeus	1,670,800	1,913,900	1,922,800	1,601,100	2,786,300	74.02%
Experimental	14,000	56,000	91,400	9,000	15,900	76.67%
Other Varieties ²	1,125,900	1,325,500	1,737,900	1,951,600	1,074,600	-44.94%
Total Idaho¹	5,837,900	6,913,800	8,724,900	9,297,700	13,759,200	47.98%
(continued next page)						

STATE/PROVINCE & VARIETY	HOP PRODUCTION (POUNDS)					2016-17
	2013	2014	2015	2016	2017	% +/-
OREGON						
Cascade	627,100	1,347,400	2,163,000	1,934,500	1,663,000	-14.03%
Centennial	394,600	485,200	853,300	893,200	940,700	5.32%
Chinook	*	*	240,000	179,200	206,700	15.35%
Citra®, HBC 394	*	*	241,000	684,700	1,056,100	54.24%
Crystal	*	*	758,100	937,200	676,900	-27.77%
Fuggle	75,300	*	90,600	143,900	107,600	-25.23%
Golding	222,700	223,500	199,300	*	253,900	
Liberty	*	*	285,600	*	*	
Magnum	146,200	189,600	312,900	225,500	80,600	-64.26%
Mosaic®, HBC 369	*	*	*	*	631,900	
Mt. Hood	346,200	390,000	367,600	473,900	457,600	-3.44%
Nugget	3,422,000	2,696,400	2,802,100	2,810,900	2,487,900	-11.49%
Perle	64,800	105,700	*	*	88,500	
Simcoe®, YCR 14	*	*	320,500	649,900	655,100	0.80%
Sterling	197,800	185,000	280,800	370,800	319,400	-13.86%
Super Galena™	377,800	288,600	191,900	*	140,400	
Tettnanger	*	*	165,200	145,600	72,900	-49.93%
Willamette	824,700	819,500	810,300	1,310,000	1,101,600	-15.91%
Experimental	60,700	*	*	*	*	
Other Varieties ²	1,770,600	1,490,100	585,600	1,636,000	972,400	-40.56%
Total Oregon	8,530,500	8,221,000	10,667,800	12,395,300	11,913,200	-3.89%
WASHINGTON						
Amarillo®, VGXP01	*	*	*	*	3,347,000	
Azacca™, ADHA-483	*	134,600	327,600	946,400	1,423,600	50.42%
Ahtanum	347,500	326,000	225,800	156,900	390,300	148.76%
Apollo™	2,051,400	1,854,300	1,938,600	1,635,600	1,866,600	14.12%
Bravo™	1,409,900	1,616,700	1,606,700	1,530,500	1,444,900	-5.59%
Cascade	7,300,000	8,821,000	9,553,300	9,638,800	10,399,100	7.89%
Centennial	2,905,200	3,818,800	4,317,300	5,908,600	7,331,400	24.08%
Chinook	2,812,300	2,354,300	2,331,100	2,008,900	2,911,500	44.93%
Citra®, HBC 394	1,820,300	2,622,500	3,597,200	5,035,000	6,371,500	26.54%
Cluster	1,562,000	1,328,600	1,135,700	1,058,800	1,202,900	13.61%
Columbus/Tomahawk®	6,006,100	4,569,200	4,223,400	2,787,900	4,389,700	57.46%
Comet	*	*	192,200	154,700	380,300	145.83%
Crystal	275,300	247,200	155,000	281,700	251,700	-10.65%
Ekuanot™, HBC 366	*	*	*	*	2,438,600	
El Dorado®	144,400	180,900	523,500	754,000	901,000	19.50%
Eureka!™	*	*	*	*	812,300	
Galena	866,300	551,000	580,600	443,300	806,700	81.98%
Glacier	123,300	151,500	154,400	169,300	*	
Golding	106,000	72,600	45,300	*	*	
Jarrylo™, ADHA-881	*	116,100	188,000	184,400	*	
Loral™, HBC 291	*	*	*	*	426,900	
Magnum	*	*	135,500	*	*	
Millennium	951,600	225,600	*	*	*	
Mosaic®, HBC 369	652,800	1,493,200	3,111,600	4,720,400	4,578,000	-3.02%
Mt. Hood	195,000	199,900	139,000	94,600	90,700	-4.12%
Northern Brewer	213,500	163,000	121,900	*	*	
Nugget	762,800	419,500	389,200	330,000	243,800	-26.12%
Palisade®, YCR-4	368,300	550,600	885,200	1,292,500	1,261,300	-2.41%
Simcoe®, YCR 14	2,183,400	2,805,800	4,489,500	6,305,100	6,725,400	6.67%
Summit™	5,326,600	5,308,300	3,189,600	2,914,500	3,342,300	14.68%
Super Galena™	2,171,500	1,552,400	957,800	775,300	1,151,400	48.51%
Tahoma	*	*	*	*	380,200	
Tettnanger	71,700	*	*	*	45,700	
Vanguard	102,500	84,400	102,700	*	*	
Willamette	647,100	672,500	703,100	929,300	825,700	-11.15%
Warrior®, YCR-5	390,400	349,700	*	*	*	
Zeus	9,635,700	9,488,400	8,426,300	6,178,500	6,836,800	10.65%
Experimental	402,900	637,000	488,400	902,700	800,300	-11.34%
Other Varieties ²	3,071,900	3,145,500	5,217,800	8,308,900	5,316,000	-36.02%
Total Washington	54,877,700	55,861,100	59,453,300	65,446,600	78,693,600	20.24%
Total Pacific Northwest	69,246,100	70,995,900	78,846,000	87,139,600	104,366,000	19.77%
Other States Estimate ³	*	*	1,249,000	1,500,000	1,875,000	25.00%
Total US Estimate	69,246,100	70,995,900	80,095,000	88,639,600	106,241,000	19.86%
Canada Estimate ³	*	*	256,500	340,000	340,000	0.00%
North America Estimate	69,246,100	70,995,900	80,351,500	88,979,600	106,581,000	19.78%

SOURCE: USDA-NASS. Prepared by HGA. ¹ Prior to 2013, only State totals published for Idaho to avoid disclosure of individual operations.

² "Other Varieties" includes data to avoid disclosure of individual operations.

³ Production outside of PNW averaged at approximately 750 pounds per acre for acreage identified in June 2017.

PACIFIC NORTHWEST HOP ACREAGE BY STATE (10 YEARS - IN ACRES)

YEAR	ACREAGE HARVESTED			TOTAL
	WASHINGTON	OREGON	IDAHO	
2008	30,595	6,370	3,933	40,898
2009	28,924	5,764	4,030	38,718
2010	24,336	4,622	2,331	31,289
2011	23,320	4,202	2,265	29,787
2012	22,696	4,391	2,596	29,683
2013	27,097	4,835	3,356	35,288
2014	28,858	5,410	3,743	38,011
2015	32,158	6,612	4,863	43,633
2016	37,444	7,765	5,648	50,857
2017	38,067	7,851	6,993	52,911

SOURCE: USDA-NASS. Prepared by HGA.

PACIFIC NORTHWEST AVERAGE HOP YIELD (TEN YEARS)

YEAR	POUNDS PER ACRE**			TOTAL
	WASHINGTON	OREGON	IDAHO	
2008	2,072	1,569	1,841	1,971
2009	2,533	1,948	1,943	2,383
2010	2,147	1,791	2,129	2,093
2011	2,200	1,908	2,408	2,175
2012	2,047	1,746	1,841	1,985
2013	2,025	1,764	1,740	1,962
2014	1,936	1,520	1,847	1,868
2015	1,849	1,613	1,794	1,807
2016	1,748	1,596	1,646	1,713
2017	2,047	1,517	1,961	1,959

SOURCE: USDA-NASS. Prepared by HGA.

U.S. HOPS: SEASON AVERAGE PRICE & TOTAL CROP VALUE

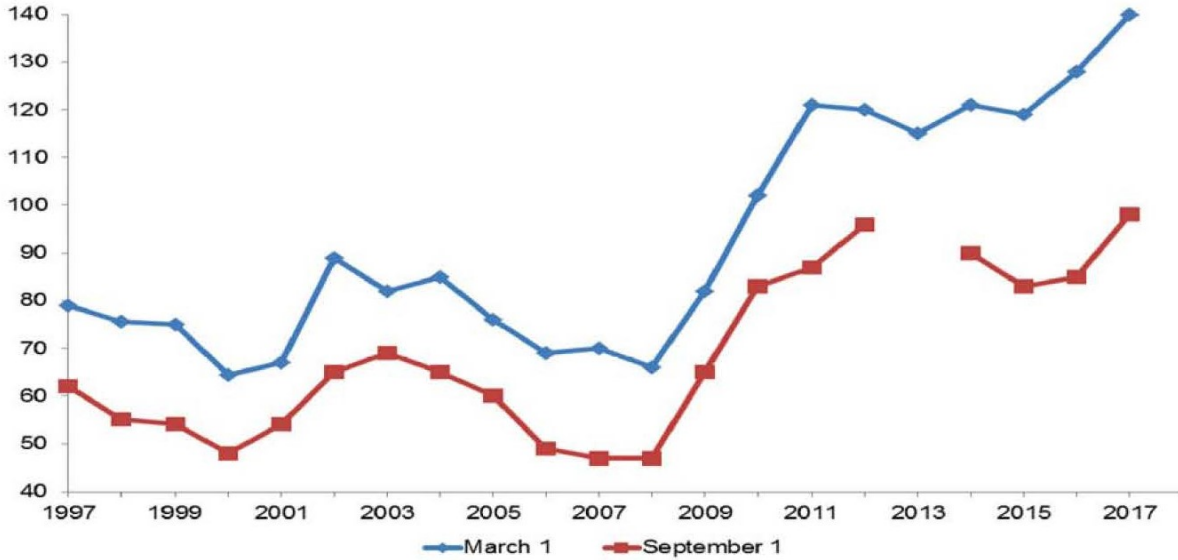
Marketing Year	SEASON AVERAGE PRICE**				U.S. Production	Total Crop Value
	Washington	Oregon	Idaho	U.S.		
	----- (\$ / pound) -----				(Lbs. x 1,000)	(x 1,000)
2008	\$4.08	\$3.75	\$4.00	\$4.03	80,630	\$325,092
2009	\$3.54	\$3.63	\$3.75	\$3.57	94,678	\$337,874
2010	\$3.11	\$3.96	\$3.89	\$3.28	65,493	\$214,589
2011	\$3.06	\$3.79	\$2.93	\$3.14	64,782	\$203,378
2012	\$3.10	\$3.91	\$2.69	\$3.17	58,911	\$186,876
2013	\$3.37	\$3.76	\$2.62	\$3.35	69,246	\$232,308
2014	\$3.73	\$4.07	\$2.72	\$3.67	70,995	\$260,627
2015	\$4.71	\$3.24	\$3.53	\$4.38	78,846	\$345,388
2016	\$5.84	\$5.25	\$5.50	\$5.72	87,140	\$498,420
2017	\$6.22	\$5.00	\$5.00	\$5.92	104,366	\$617,836

SOURCE: USDA-NASS. Prepared by HGA.

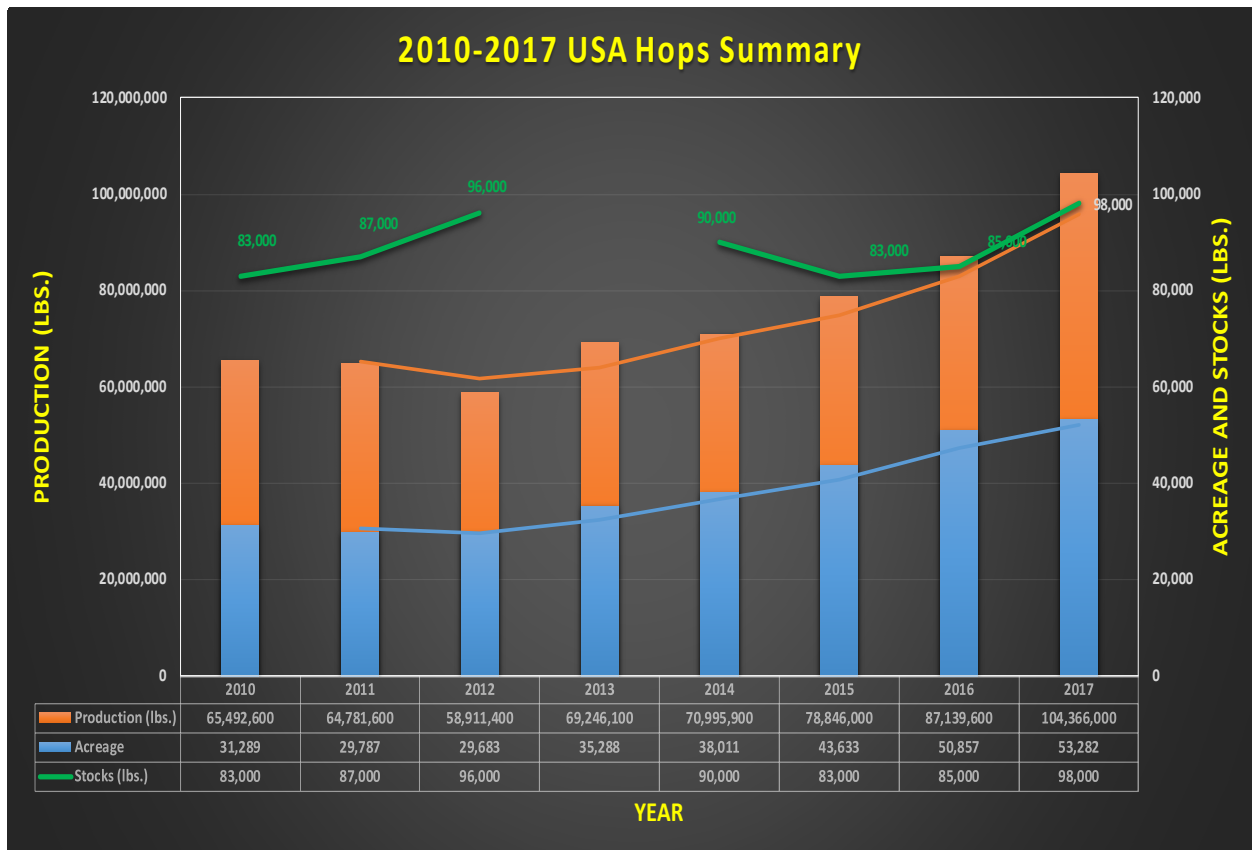
U.S. HOPS STOCKS (20 YEAR and 8 YEAR LOOK)

Hop Stocks – United States

Million pounds



SOURCE: USDA-NASS. Due to Federal funding cuts in 2013 the September Hop Stocks survey was not conducted.



SOURCE: USDA-NASS. Prepared by NASS and HGA. Due to Federal funding cuts in 2013 the September Hop Stocks survey was not conducted.

2017 HOP INSPECTION REPORT

YEAR	WASHINGTON	OREGON	IDAHO	TOTAL
2013	266,356	35,388	28,412	330,156
2014	271,891	38,592	34,137	344,620
2015	284,461	47,202	42,301	373,964
2016	329,539	59,641	47,123	436,303
2017	397,491	61,652	66,328	525,471

	0%	1%	2%	3%	4%	5%	6%	7%	TOTAL	AVERAGE
WA	307,704	77,944	9,032	2,499	240	39	0	33	397,491	0.26%
OR	34,958	23,712	2,057	925	0	0	0	0	61,652	0.50%
ID	41,145	21,464	2,494	904	321	0	0	0	66,328	0.46%
Total	383,807	123,120	13,583	4,328	561	39	0	33	525,471	0.32%
% of Total	73%	23%	3%	1%	0%	0%	0%	0%	100%	

	0%	1%	2%	3%	4%	5%	6%	7+%	TOTAL	AVERAGE
WA	251,560	87,119	32,793	10,878	6,183	2,692	1,815	4,451	397,491	0.67%
OR	16,073	13,152	8,209	5,295	4,171	5,228	2,725	6,799	61,652	2.47%
ID	56,000	3,092	1,998	1,187	446	211	294	3,100	66,328	0.56%
Total	323,633	103,363	43,000	17,360	10,800	8,131	4,834	14,350	525,471	0.87%
% of Total	68%	19%	6%	3%	1%	1%	1%	1%	100%	

SOURCE: State Hop Inspection Labs. Prepared by HGA.

U.S. HOP LEAF, STEM & SEED CONTENT PERCENTAGE (10 YEARS)

Year	WASHINGTON Leaf & Stem	OREGON Leaf & Stem	IDAHO Leaf & Stem	U.S. AVERAGE %	
				Leaf & Stem	Seed Content
2008	0.34	0.22	0.03	0.31	1.85
2009	0.12	0.25	0.15	0.14	0.82
2010	0.17	0.15	0.04	0.16	1.31
2011	0.14	0.09	0.02	0.12	1.34
2012	0.33	0.16	0.05	0.29	0.66
2013	0.28	0.34	0.23	0.28	0.68
2014	0.32	0.18	0.09/1.11	0.30	0.64
2015	0.42	0.51	0.32	0.42	0.78
2016	0.33	0.31	0.19	0.31	1.31
2017	0.26	0.50	0.46	0.32	0.87

SOURCE: State Hop Inspection Labs. Prepared by HGA.

2017 US-GROWN HOP VARIETY CODES

Brand/Variety	Code	Brand/Variety	Code
Ahtanum™, YCR 1	AHT	Loral™, HBC 291	LOR
Alpharoma	AA	Magnum	MAG
VGXP01 Amarillo®	VG1	Meridian	MER
Apollo™	APO	Millennium	MLM
Aquila	AQU	Mosaic®, HBC 369	MOS
Azacca™, ADHA-483	AZA	Mt. Hood	MTH
Banner	BAN	Mt. Rainier	MTR
Belma	BEL	Newport	NWP
Bitter Gold	BIG	Northern Brewer	NB
Bravo™	BRO	Nugget	NUG
Brewers Gold	BG	Olympic	OLC
BRU-1	BR1	Other	OTH
Bullion	BU	Palisade®, YCR 4	PAL
Calypso™	CPO	Pekko™, ADHA-871	PEK
Cascade	CAS	Perle	PE
Cashmere	CMR	Saaz	SA
Centennial	CEN	Santiam	SNT
Chelan	CHE	Satus®, YCR 7	SAT
Chinook	CHI	Serebrianka	SEK
Citra®, HBC 394	CIT	Simcoe®, YCR 14	SIM
Cluster	CLU	Sonnet™	SON
Columbia	CBA	Sorachi Ace	SOR
Columbus	CBS	Spalter	SP
Comet	COM	Sterling	STR
Crystal	CRY	Strata™, OR91331	STT
Delta™	DEL	Strissel Spalt	SSP
Denali™	DEN	Summit™	SUM
Ekuanot™, HBC 366	EKU	Super Galena™	SGA
El Dorado®	ELD	Tahoma	TAH
Eroica	ERO	Talisman	TLN
Eureka!™	EU!	Teamaker	TMK
Experimental	EXP	Tettnanger	TE
Fuggle	FU	Tillicum	TIL
Galena	GAL	Tomahawk®, F10	TOM
Glacier	GLC	Topaz	TO
Golding	GO	TriplePearl	TRP
Hallertauer	HA	Triumph	TRI
HBC 682	682	Ultra	ULT
Horizon	HOR	Vanguard	VAN
Idaho7™	ID7	Warrior®, YCR 5	WAR
Jarrylo™, ADHA-881	JAR	Willamette	WIL
Lemondrop™	LDP	Yakima Gold	YKG
Liberty	LIB	Zeus	ZEU

IHGC AROMA ACREAGE (FIVE YEARS)

COUNTRY	AROMA ACREAGE (IN ACRES)					2016-17 % +/-
	2013	2014	2015	2016	2017	
Australia	158	158	217	247	247	0.00%
Austria	462	460	462	462	460	-0.53%
Belgium	173	190	205	220	282	28.09%
China	494	741	618	494	494	0.00%
Czech Rep.	10,045	9,902	10,253	10,826	11,325	4.61%
France	741	808	899	941	991	5.25%
Germany	21,733	22,732	23,908	24,867	25,927	4.26%
New Zealand	712	712	811	877	917	4.51%
Poland	1,132	1,253	1,391	1,530	1,562	2.10%
Romania	151	156	156	168	180	7.35%
Russia	208	208	208	208	544	161.90%
Serbia	84	84	84	84	84	0.00%
Slovakia	430	339	339	339	339	0.00%
Slovenia	2,535	2,728	2,973	3,242	3,460	6.71%
South Africa	0	0	0	0	84	0.00%
Spain	0	0	0	0	0	0.00%
Ukraine	932	764	764	764	764	0.00%
UK - England	1,965	1,740	1,690	1,693	1,999	18.10%
USA	19,996	24,711	33,738	43,000	44,252	2.91%
IHGC Total	61,950	67,683	78,714	89,960	93,909	4.39%

SOURCE: IHGC Economic Commission November report. US hop acreage estimates are based on USDA-NASS August Pre-Harvest Estimates report, which will vary from final Acreage Harvested figures in the December USDA-NASS National Hop Report. Numbers may not total exactly due to rounding and standard/metric conversions. Figures in italics represent previous estimates, with no new figure provided in November.

IHGC ALPHA ACREAGE (FIVE YEARS)

COUNTRY	ALPHA ACREAGE (IN ACRES)					2016-17 % +/-
	2013	2014	2015	2016	2017	
Australia	951	850	988	1,100	1,102	0.22%
Austria	106	143	143	143	143	0.00%
Belgium	217	175	161	148	133	-10.00%
China	6,919	5,807	5,066	4,448	4,448	0.00%
Czech Rep.	133	116	106	114	114	0.00%
France	146	131	121	82	89	9.09%
Germany	17,162	17,051	17,345	17,925	18,716	4.41%
New Zealand	222	203	148	141	175	24.56%
Poland	2,093	1,972	1,940	2,039	2,083	2.18%
Romania	445	450	462	474	474	0.00%
Russia	133	133	133	133	494	270.37%
Serbia	82	82	82	82	82	0.00%
Slovakia	0	0	0	0	0	0.00%
Slovenia	86	89	62	57	49	-13.04%
South Africa	1,216	1,038	1,038	1,038	964	-7.14%
Spain	1,194	1,285	1,320	1,325	1,327	0.19%
Ukraine	203	148	148	148	148	0.00%
UK - England	633	551	519	519	390	-24.76%
USA	15,227	13,299	11,500	9,981	12,385	24.09%
IHGC Total	47,168	43,523	41,282	39,896	43,318	8.58%

SOURCE: IHGC Economic Commission November report. US hop acreage estimates are based on USDA-NASS August Pre-Harvest Estimates report, which will vary from final Acreage Harvested figures in the December USDA-NASS National Hop Report. Numbers may not total exactly due to rounding and standard/metric conversions. Figures in italics represent previous estimates, with no new figure provided in November.

IHGC TOTAL ACREAGE (FIVE YEARS)

COUNTRY	TOTAL ACREAGE (IN ACRES)					2016-17
	2013	2014	2015	2016	2017	% +/-
Australia	1,110	1,008	1,206	1,349	<i>1,559</i>	15.57%
Austria	568	603	605	615	618	0.40%
Belgium	390	366	366	368	418	13.42%
China	7,413	6,548	5,684	4,942	<i>4,942</i>	0.00%
Czech Rep.	10,178	10,018	10,359	11,800	12,220	3.56%
France	887	939	1,021	1,134	1,189	4.79%
Germany	38,895	39,782	41,253	45,958	48,293	5.08%
New Zealand	934	914	959	1,018	1,092	7.28%
Poland	3,225	3,225	3,329	3,645	<i>3,991</i>	9.49%
Romania	596	605	618	667	667	0.00%
Russia	341	341	341	1,038	<i>1,161</i>	11.90%
Serbia	166	166	166	195	<i>195</i>	0.00%
Slovakia	430	339	339	339	339	0.00%
Slovenia	2,622	2,817	3,035	3,667	3,929	7.14%
South Africa	1,216	1,038	1,038	1,021	1,048	2.66%
Spain	1,194	1,285	1,320	1,325	<i>1,327</i>	0.19%
Ukraine	1,134	912	912	912	<i>912</i>	0.00%
UK - England	2,597	2,291	2,209	2,271	2,390	5.22%
USA	35,223	38,010	45,238	52,963	56,638	6.94%
IHGC Total	109,119	111,207	119,994	135,226	142,926	5.69%

SOURCE: IHGC Economic Commission November report. US hop acreage estimates are based on USDA-NASS August Pre-Harvest Estimates report, which will vary from final Acreage Harvested figures in the December USDA-NASS National Hop Report. IHGC Total Acreage includes baby acreage (not included in separate aroma and alpha tables). Numbers may not total exactly due to rounding and standard/metric conversions. Figures in italics represent previous estimates, with no new figure provided in November.

IHGC HOP ACREAGE AND PRODUCTION 2017

COUNTRY	2017 HOP ACREAGE (acres)				2017 HOP PRODUCTION (pounds)			
	AROMA	ALPHA	NEW	TOTAL	AROMA	ALPHA	TOTAL	Alpha MT.
Australia	247	<i>1,102</i>	210	<i>1,559</i>	524,695	2,645,520	3,170,215	211
Austria	460	143	17	620	716,495	251,324	967,819	35
Belgium	282	133	20	435	277,780	174,163	451,943	18
China	494	<i>4,448</i>	0	<i>4,942</i>	<i>881,840</i>	<i>11,243,460</i>	<i>12,125,300</i>	400
Czech Rep.	11,325	114	781	12,220	14,451,153	209,437	14,660,590	245
France	991	89	109	1,189	1,490,310	191,800	1,682,110	27
Germany	25,927	18,716	781	45,424	44,643,150	46,406,830	91,049,980	4,200
New Zealand	917	175	74	1,166	1,366,852	308,644	1,675,496	72
Poland	<i>1,562</i>	<i>2,083</i>	<i>346</i>	<i>3,991</i>	<i>1,763,680</i>	<i>3,747,820</i>	<i>5,511,500</i>	169
Romania	180	474	12	667	143,299	308,644	451,943	20
Russia	544	494	124	<i>1,161</i>	<i>551,150</i>	<i>551,150</i>	<i>1,102,300</i>	40
Serbia	84	82	30	195	127,867	167,550	295,416	11
Slovakia	339	0	0	339	229,278	0	229,278	5
Slovenia	3,460	49	420	3,929	5,899,510	132,276	6,031,786	150
South Africa	84	964	0	1,048	101,412	1,450,627	1,552,038	85
Spain	0	<i>1,327</i>	2	<i>1,329</i>	0	<i>1,212,530</i>	<i>1,212,530</i>	70
Ukraine	764	148	0	912	<i>881,840</i>	176,368	1,058,208	30
UK - England	1,999	390	12	2,402	2,824,093	1,102,300	3,926,393	132
USA	44,252	12,385	255	56,892	77,178,637	28,789,871	105,968,508	5,114
IHGC Total	93,909	43,318	3,193	140,420	154,053,039	99,070,315	253,123,354	11,034

SOURCE: IHGC Economic Commission November report. US hop acreage estimates are based on USDA-NASS August Pre-Harvest Estimates report, and production estimates are based on Hop Inspection Lab bale counts. Both will vary from final Acreage Harvested and Production figures in the December USDA-NASS National Hop Report. IHGC Total Acreage includes baby acreage (not included in separate aroma and alpha tables). Numbers may not total exactly due to rounding and standard/metric conversions. Figures in italics represent previous estimates, with no new figure provided in November.

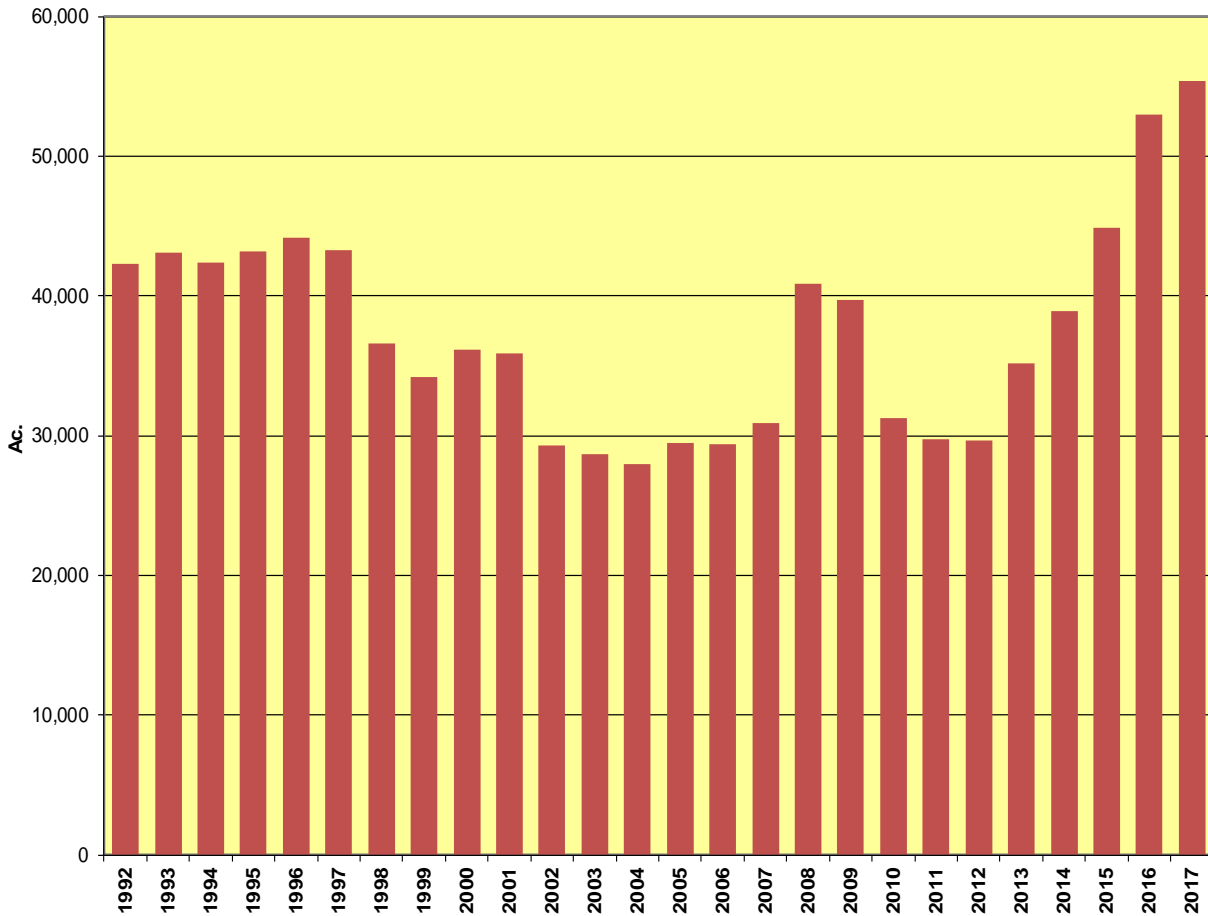
U.S. & GERMAN ALPHA ACID PRODUCTION (10 YEARS)

YEAR	UNITED STATES				GERMANY			
	Pounds of Hops (x 1,000)	MT Hops	MT Alpha	Avg. Alpha %*	Pounds of Hops (x 1,000)	MT Hops	MT Alpha	Avg. Alpha %*
2008	80,630	36,574	4,150	11.3%	70,854	32,139	4,100	12.8%
2009	91,491	41,500	4,690	11.3%	87,104	39,510	3,520	8.9%
2010	64,954	29,463	3,517	11.9%	75,177	34,100	3,600	10.6%
2011	64,992	29,480	4,308	14.6%	82,673	37,500	4,400	11.7%
2012	61,249	27,782	3,500	12.6%	76,059	34,500	3,850	11.2%
2013	69,246	31,410	3,680	11.7%	60,746	27,554	2,680	9.7%
2014	70,996	32,204	3,541	11.0%	74,956	38,500	4,104	10.7%
2015	80,351	36,447	3,856	10.6%	62,170	28,200	2,700	9.6%
2016	88,640	40,207	4,082	10.2%	94,304	42,776	4,775	11.2%
2017	106,241	48,191	5,114	10.6%	91,050	41,300	4,200	10.2%

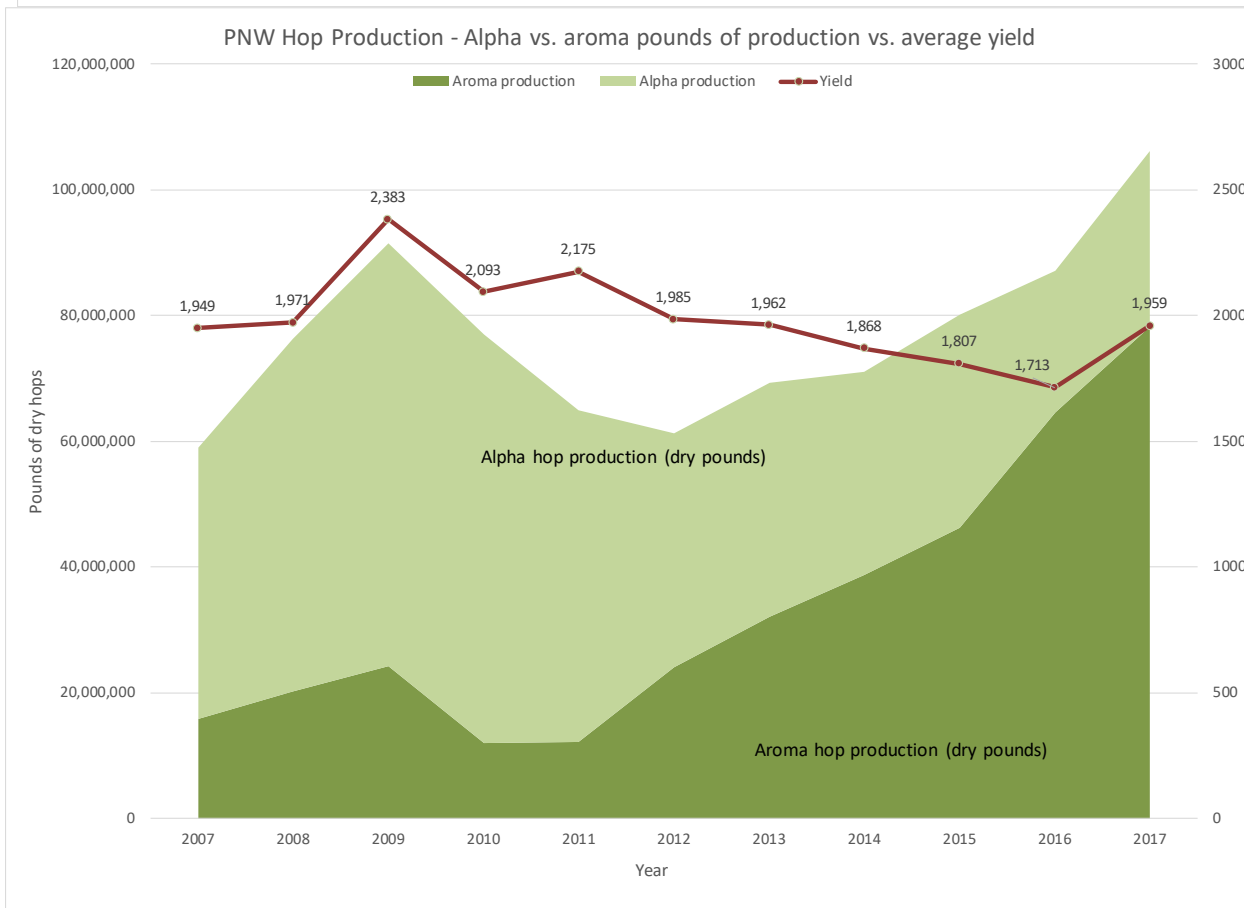
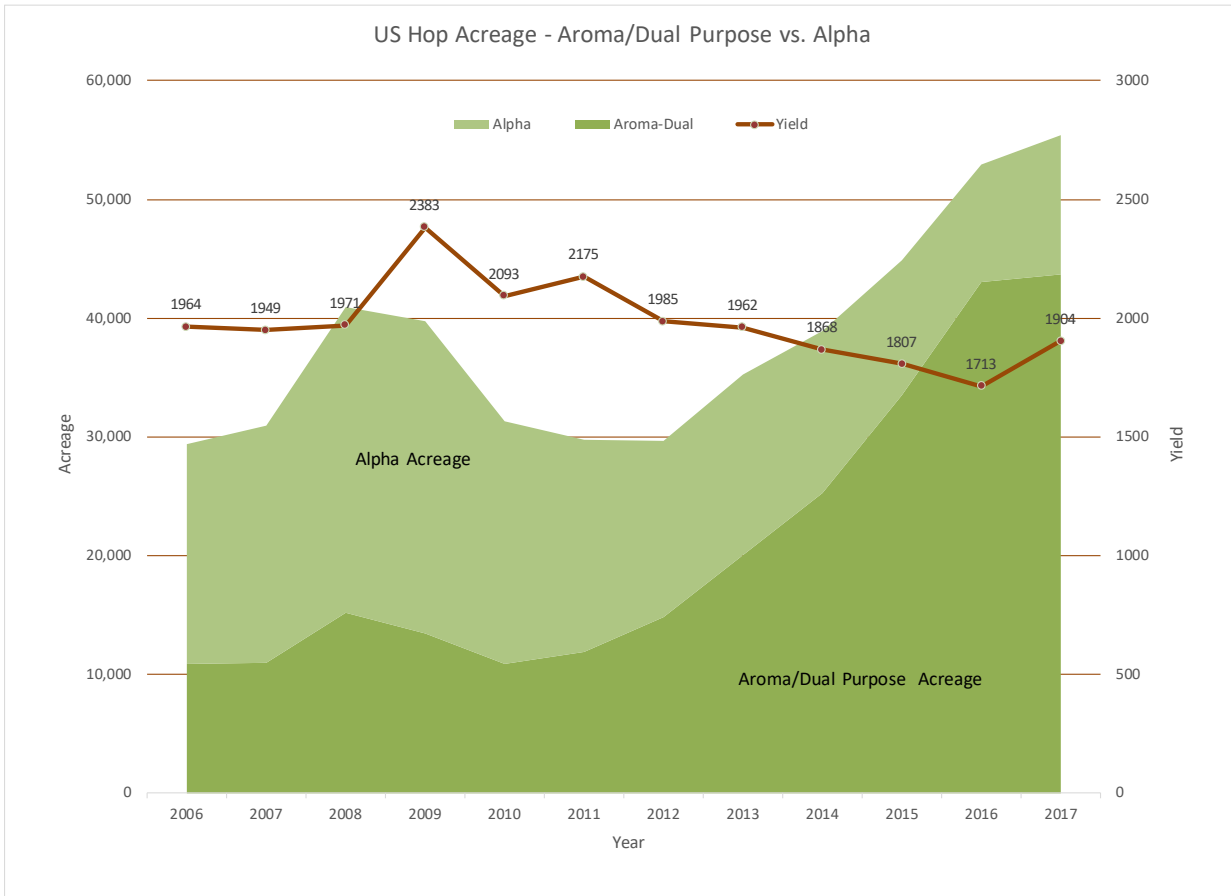
SOURCE: Estimates from IHGC 2017 November Economic Commission report. US production figures are updated to include an estimate for non-PNW states, added to the Pacific Northwest production reported by USDA-NASS in the December National Hop Report. Prepared by HGA.

*Figures presented in the chart are the result of dividing the estimated MT Alpha by MT Hops for each year. This does not represent an estimate based on any type of analytical procedure.

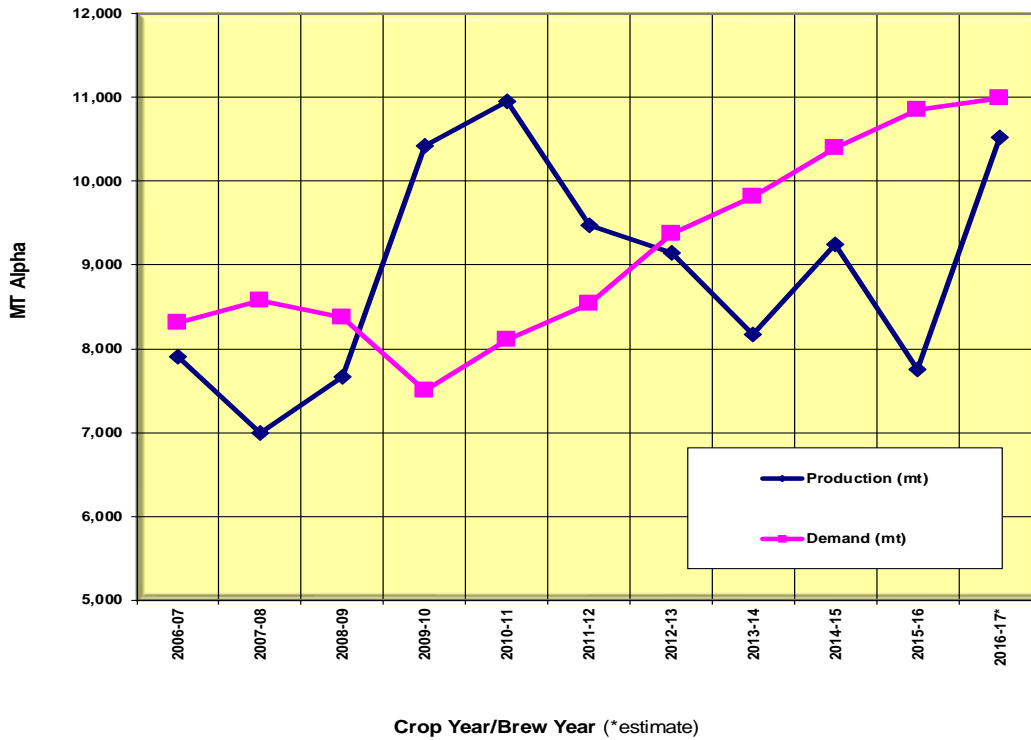
US HOP ACREAGE (1992-2017)



SOURCE: USDA-NASS and HGA Hop Acreage Reports

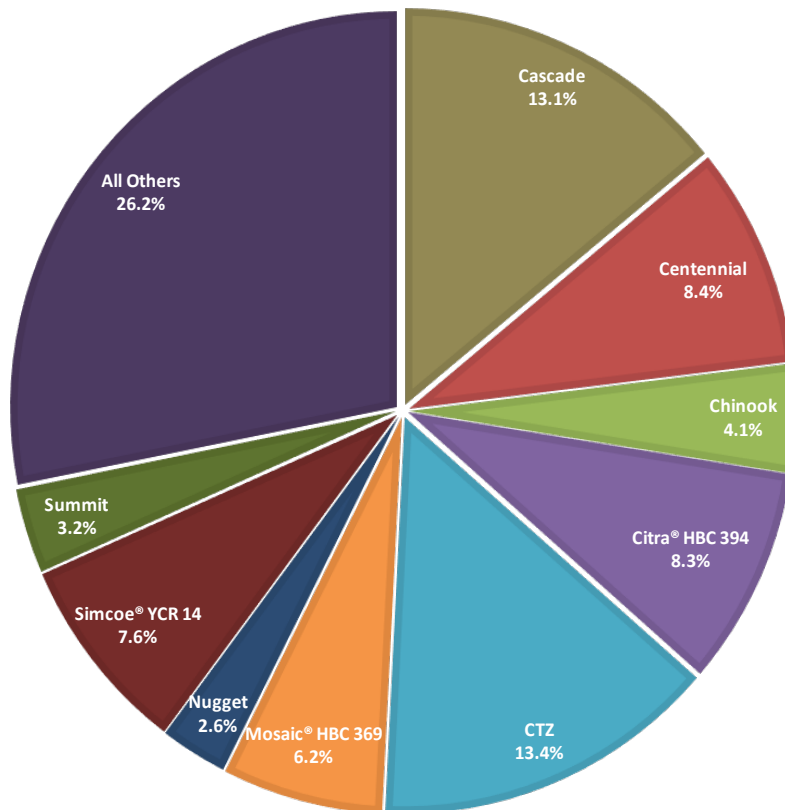


WORLD ALPHA PRODUCTION & DEMAND



SOURCE: Barth Report. 2016-17. Prepared by HGA.

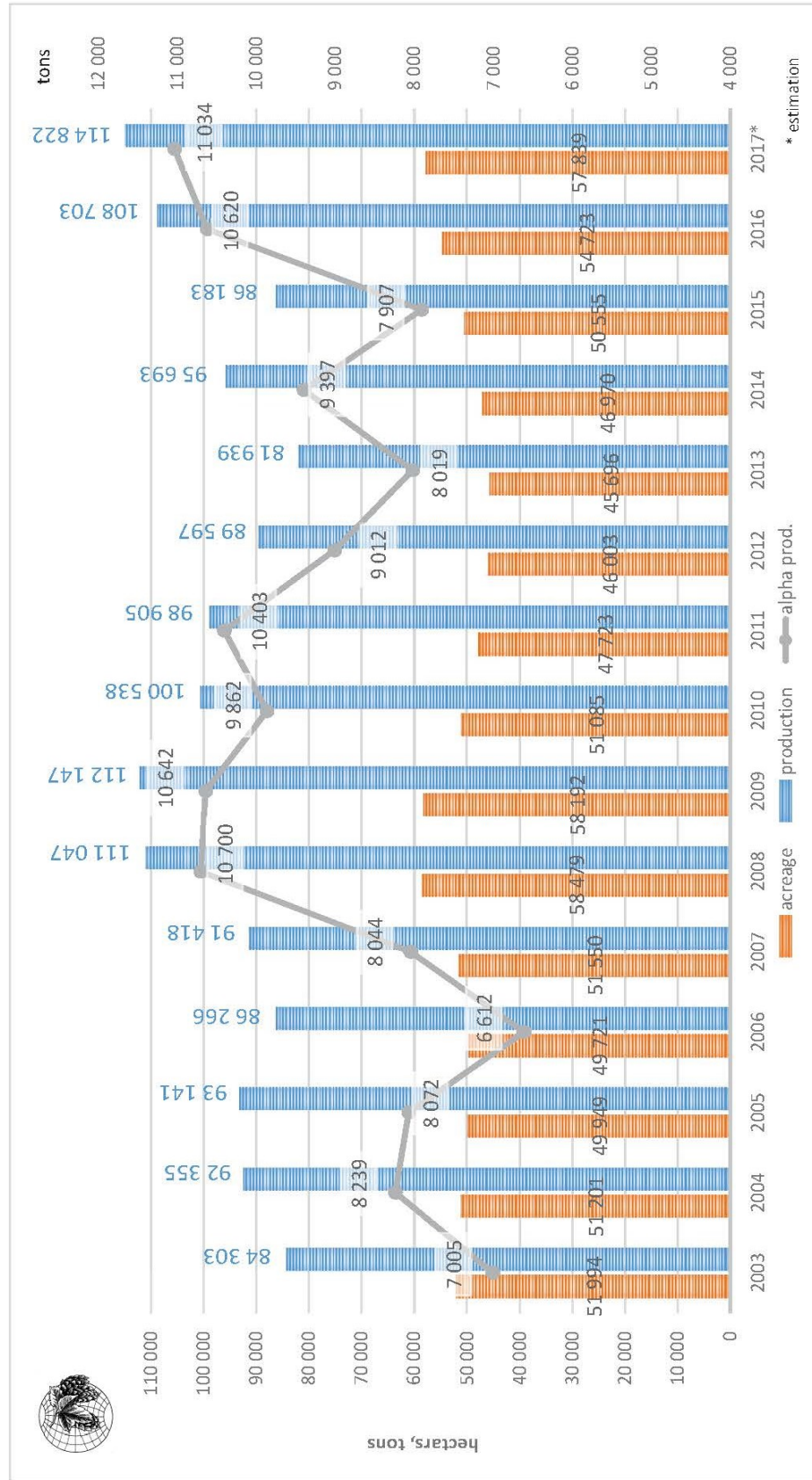
MAJOR US HOP VARIETIES – 2017 (% of US Production)



SOURCE: USDA-NASS. Prepared by HGA.

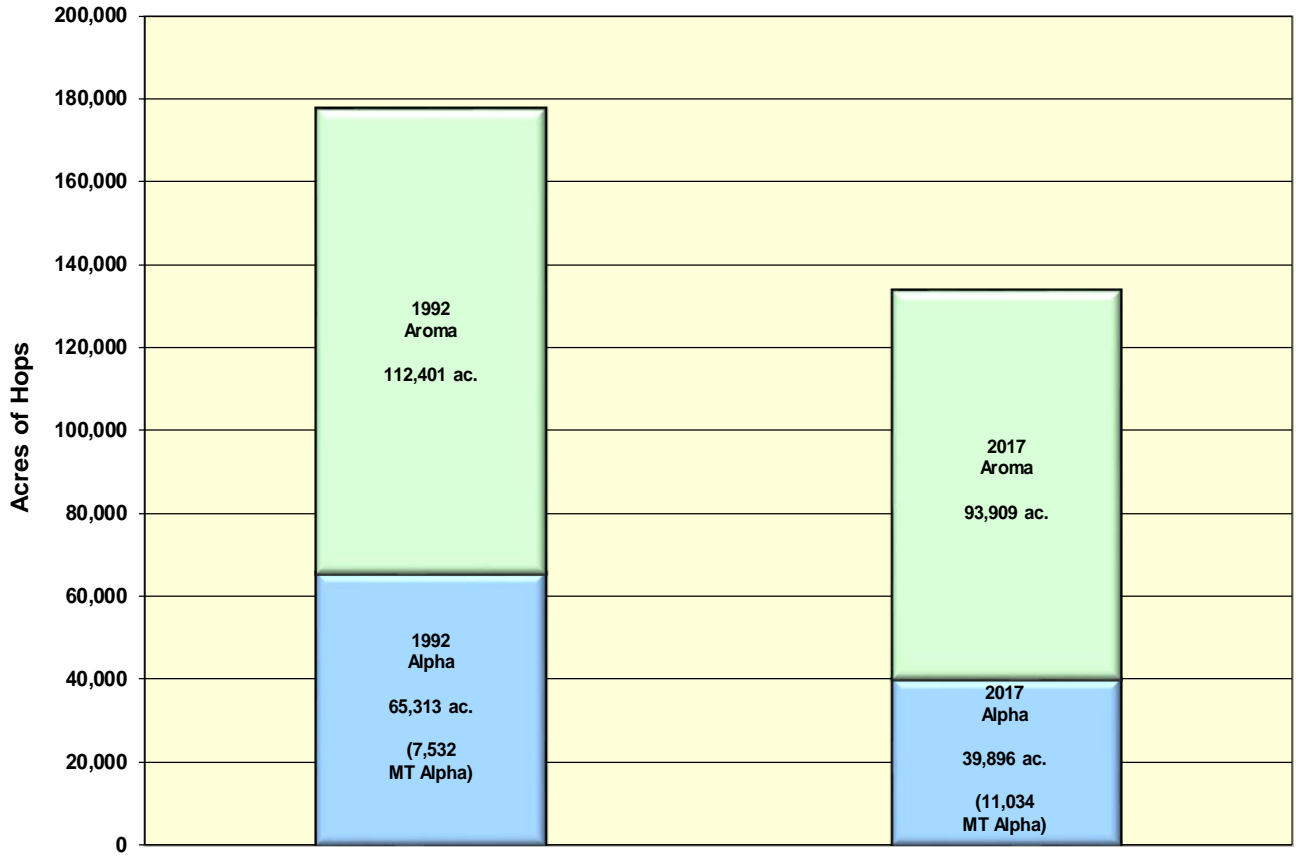
COMPARISON OF IHGC CROPS 2002-2017

Figure 1: Comparison of IHGC crops 2003 - 2017* (acreage, production, alpha acids production)



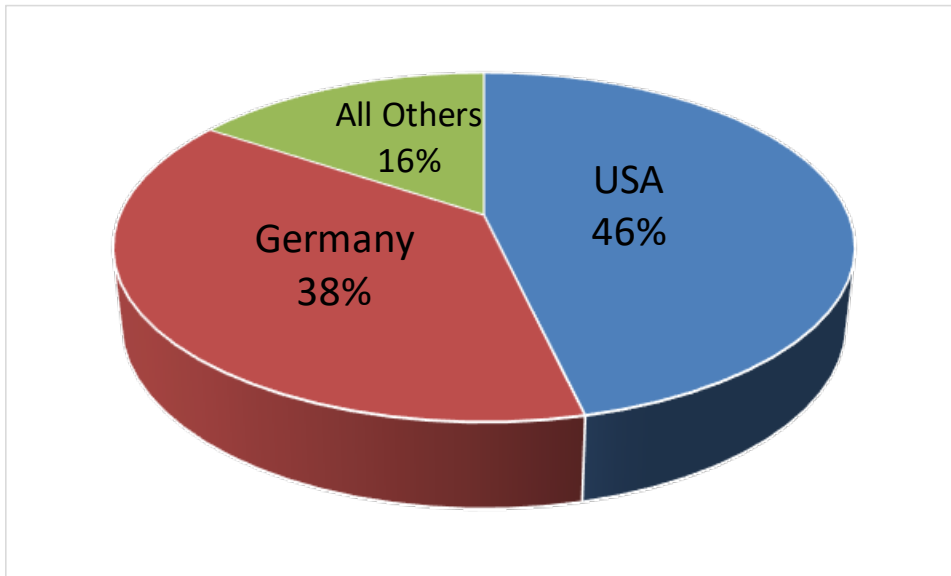
Source: IHGC November 2017 Country Reports

COMPOSITION OF WORLD HOP ACREAGE - 1992 VERSUS 2017



SOURCE: IHGC November Report and USDA NASS December National Hop Report. Prepared by HGA.

WORLD'S LARGEST ALPHA PRODUCERS – 2017



SOURCE: IHGC November Report. Prepared by HGA.

WORLD HOP ACREAGE & PERCENT SHARE (acres)

COUNTRY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Germany	43,269	43,902	44,749	43,818	40,887	38,895	39,782	41,253	45,958	45,424
	33%	33%	36%	38%	37%	35%	34%	34%	34%	33%
UK-England	2,718	2,669	2,669	2,750	2,597	2,597	2,291	2,209	2,212	2,402
	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Czech Rep.	12,664	12,479	12,398	10,952	10,564	10,178	10,018	10,359	11,800	12,220
	10%	9%	10%	10%	10%	9%	9%	9%	9%	9%
Europe (rest)	17,236	16,222	16,186	13,178	11,842	11,897	14,881	11,711	13,015	13,606
	13%	12%	13%	12%	11%	11%	13%	10%	10%	10%
USA	39,263	40,126	31,247	28,787	29,683	35,288	38,892	45,238	52,980	55,415
	29%	30%	25%	25%	27%	32%	34%	38%	39%	40%
China	14,322	14,322	14,322	11,016	9,961	7,413	6,548	5,684	4,942	4,942
	11%	11%	11%	10%	9%	7%	6%	5%	4%	4%
World (rest)	3,633	3,991	3,941	3,620	3,575	3,650	3,508	3,544	3,793	4,934
	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%
World Totals	133,105	133,711	125,512	114,121	109,109	109,918	115,920	119,994	134,700	138,943

Europe (rest): Austria, Belgium, France, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Ukraine.

World (rest): Australia, New Zealand, Russia, South Africa.

SOURCE: IHGC Economic Commission November 2017 report. US figures adjusted to match December 2017 USDA-NASS National Hop Report. Prepared by HGA.

WORLD HOP PRODUCTION & PERCENT SHARE (pounds x 1,000)

COUNTRY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Germany	87,104	68,894	75,177	82,673	76,059	60,746	84,657	62,170	94,136	91,050
	36%	28%	34%	38%	39%	34%	41%	33%	40%	36%
England	2,976	3,197	3,197	3,351	3,217	2,723	2,205	2,866	3,197	3,926
	1%	1%	1%	2%	2%	2%	1%	2%	1%	2%
Czech	14,771	14,109	16,204	13,779	9,480	11,750	13,007	10,582	15,653	14,661
	6%	6%	7%	6%	5%	7%	6%	6%	7%	6%
Europe (rest)	23,115	22,780	21,398	17,077	14,777	14,202	17,791	14,874	18,466	17,893
	9%	9%	10%	8%	7%	8%	9%	8%	8%	7%
USA	76,235	91,491	64,954	64,992	61,316	69,343	70,997	80,203	88,616	106,241
	31%	38%	29%	30%	31%	39%	34%	42%	37%	42%
China	35,494	35,494	35,494	29,982	26,334	13,228	13,228	13,228	9,921	12,125
	14%	15%	16%	14%	13%	7%	6%	7%	4%	5%
World (rest)	5,324	6,927	7,068	5,939	6,309	6,446	6,231	6,444	6,351	7,500
	2%	3%	3%	3%	3%	4%	3%	3%	3%	3%
World Totals	245,019	242,892	223,492	217,793	197,492	178,438	208,116	190,367	236,340	253,396

Europe (rest): Austria, Belgium, France, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Ukraine.

World (rest): Australia, New Zealand, Russia, South Africa.

SOURCE: IHGC Economic Commission November 2017 report US figures adjusted to match December 2017 USDA-NASS National Hop Report. Prepared by HGA.

U.S. HOP EXPORTS, TOP 40 COUNTRIES (2013 through 2017)*(In pounds; extract is converted to fresh hop equivalent at a ratio of 4:1)*

Rank	Country	2013	2014	2015	2016	2017
1	United Kingdom	7,172,078	8,261,823	7,837,874	10,755,471	9,549,543
2	Mexico	9,036,307	6,605,269	10,188,001	8,038,715	5,528,311
3	Belgium-Luxembourg	4,627,723	4,897,348	4,125,290	3,709,498	5,452,472
4	China	2,862,702	3,603,455	4,116,692	3,458,171	4,652,194
5	Brazil	4,056,505	3,976,037	3,579,425	3,568,843	3,956,416
6	Germany	5,130,157	2,918,700	3,868,010	5,226,058	3,772,550
7	Canada	1,788,390	2,434,785	2,685,451	3,186,561	3,369,986
8	Colombia	2,223,362	2,520,986	1,776,044	1,972,696	2,127,902
9	Japan	1,815,948	1,603,642	2,133,193	1,970,492	1,788,169
10	Australia	1,070,344	1,055,573	1,014,567	1,349,009	1,651,483
11	Korea, South	1,173,961	1,644,869	1,460,121	2,089,982	1,553,818
12	Argentina	985,907	886,479	983,262	727,525	1,089,084
13	Dominican Republic	766,547	890,006	574,084	925,060	1,083,572
14	Vietnam	385,368	377,431	513,457	840,843	1,043,889
15	Hong Kong	1,046,755	1,297,200	951,295	1,200,637	1,039,039
16	South Africa	427,035	369,495	591,721	591,721	1,023,827
17	Peru	949,751	711,432	949,972	900,368	1,002,442
18	Russia	416,012	445,554	365,085	742,958	798,073
19	Philippines	600,760	363,101	652,127	679,685	547,187
20	Ireland	349,433	17,857	184,086	402,564	497,804
21	Guatemala	287,262	166,229	242,729	441,586	455,255
22	Cambodia	129,191	86,201	129,852	211,644	355,385
23	Ecuador	398,596	523,377	424,831	337,969	346,346
24	India	395,950	219,801	173,504	199,959	322,536
25	Chile	741,855	459,443	368,392	419,760	309,749
26	Panama	71,209	161,158	111,554	102,294	294,978
27	New Zealand	74,516	50,486	323,418	192,243	279,326
28	Venezuela	2,886,292	1,950,650	1,486,797	923,957	183,866
29	Thailand	168,433	466,057	550,935	110,011	166,449
30	Singapore	88,626	55,997	130,514	75,839	142,860
31	Honduras	146,166	67,902	78,044	114,861	140,655
32	Czech Republic	0	23,149	3,307	11,905	140,214
33	Nigeria	258,382	113,759	7,055	3,527	138,450
34	Uruguay	24,692	63,714	42,549	92,153	131,836
35	Bolivia	153,221	162,040	154,103	68,343	129,191
36	Malaysia	135,805	110,231	101,413	108,467	117,065
37	El Salvador	77,823	73,414	75,619	89,508	115,081
38	Indonesia	213,407	198,416	116,845	295,860	105,160
39	Turkey	38,581	37,920	113,759	100,090	98,767
40	Netherlands	102,294	294,317	142,639	142,860	95,681
	All other countries	1,108,264	1,493,632	1,555,141	956,365	848,118
	Grand Total	54,385,612	51,658,935	54,882,754	57,336,058	56,444,729

Data Source: U.S. Census Bureau Trade Data. Compiled 12/20/2017 by Agralytica.

Original data in MTs converted to lbs. by multiplying by 2204.6225. Extract multiplied again by 4

U.S. HOP EXPORTS BY PRODUCT (TOP 40) – 2016-17

Rank	Country	Extract	Fresh/Dried	Ground	Pellets	Grand Total
1	United Kingdom	3,024,742	3,129,241	45,415	3,350,144	9,549,543
2	Mexico	5,015,957	1,323	32,849	478,183	5,528,311
3	Belgium-Luxembourg	2,595,282	376,329	0	2,480,862	5,452,472
4	China	3,906,591	2,425	14,551	728,628	4,652,194
5	Brazil	3,007,987	46,518	0	901,911	3,956,416
6	Germany	1,725,778	273,153	67,241	1,706,378	3,772,550
7	Canada	445,334	113,318	606,492	2,204,843	3,369,986
8	Colombia	858,921		1,323	1,267,658	2,127,902
9	Japan	595,248	3,086	0	1,189,835	1,788,169
10	Australia	533,519	117,947	0	1,000,017	1,651,483
11	Korea, South	1,249,580	9,480	5,952	288,806	1,553,818
12	Argentina	539,692	0		549,392	1,089,084
13	Dominican Republic	1,074,974		0	8,598	1,083,572
14	Vietnam	1,029,118		0	14,771	1,043,889
15	Hong Kong	796,310	0	0	242,729	1,039,039
16	South Africa	1,003,544	0	0	20,283	1,023,827
17	Peru	529,991	105,381		367,070	1,002,442
18	Russia	364,204	22,928		410,942	798,073
19	Philippines	290,128	9,259	0	247,800	547,187
20	Ireland	400,359	0		97,444	497,804
21	Guatemala	420,642	0	0	34,613	455,255
22	Cambodia	355,385			0	355,385
23	Ecuador	268,082	220	0	78,044	346,346
24	India	121,695		0	200,841	322,536
25	Chile	244,272	661	0	64,816	309,749
26	Panama	280,428	0	0	14,551	294,978
27	New Zealand	53,793	0	0	225,533	279,326
28	Venezuela	183,425		0	441	183,866
29	Thailand	147,269	18,960	0	220	166,449
30	Singapore	140,214		0	2,646	142,860
31	Honduras	116,404	24,251		0	140,655
32	Czech Republic	3,527	120,593		16,094	140,214
33	Nigeria	138,450			0	138,450
34	Uruguay	29,101		0	102,735	131,836
35	Bolivia	37,920			91,271	129,191
36	Malaysia	116,404	0		661	117,065
37	El Salvador	91,712	5,071	0	18,298	115,081
38	Indonesia	93,476	0		11,684	105,160
39	Turkey	79,366	0	0	19,401	98,767
40	Netherlands	0	0	2,646	93,035	95,681
	All other countries	534,400	93,917	56,879	162,922	848,118
	Grand Total	32,443,225	4,474,061	833,347	18,694,096	56,444,729

Data Source: U.S. Census Bureau Trade Data. Compiled 12/20/2017 by Agralytica.

Original data in MTs converted to lbs. by multiplying by 2204.6225. Extract multiplied again by 4

U.S. IMPORTS OF HOPS (FIVE YEARS)*(In pounds; extract converted at 4:1 ratio)*

Rank	Country	2013	2014	2015	2016	2017
1	Germany	5,402,868	4,773,890	5,743,483	7,230,500	8,001,016
2	United Kingdom	1,328,065	1,150,152	2,366,001	2,131,429	1,170,214
3	Australia	634,490	1,105,839	1,058,660	1,453,949	1,324,758
4	New Zealand	333,780	933,878	807,333	676,599	678,803
5	China	544,983	829,820	229,942	14,991	250,445
6	Czech Republic	283,735	223,549	318,127	179,456	463,412
7	Slovenia	113,097	171,520	178,354	173,724	402,123
8	France	23,810	132,057	140,875	49,163	125,443
9	Italy	2,205	26,015	47,620	13,228	136,687
10	Spain	0	20,283	4,409	0	0
11	Poland	11,684	7,496	5,952	7,937	0
12	South Africa	882	3,527	2,205	24,912	70,107
13	Peru	0	3,086	0	0	0
14	Belgium-Luxembourg	0	882	6,834	57,541	39,463
15	India	0	0	2,866	0	0
16	Slovakia	0	0	31,747	0	9,921
17	Canada	14,991	0	2,425	11,244	87,524
18	Argentina	1,764	0	3,748	0	0
19	Latvia	0	0	0	6,614	0
20	Ethiopia	2,205	0	441	4,630	17,196
21	Switzerland	4,409	0	0	0	0
	Grand Total	8,702,968	9,381,992	10,951,021	12,035,916	12,777,110

Data Source: U.S. Census Bureau Trade Data. Compiled 12/20/17 by Agralytica.

Original data in MTs converted to lbs. by multiplying by 2204.6225. Extract multiplied again by 4

WORLD BEER PRODUCTION BY BREWERY (TOP 10) – 2015-16 (MILLION HL)

Brewery	2015 Production	2015 % Share	2016 Production	2016 % Share
ABInBev	409.9	21.2%	433.9	22.2%
Heineken	188.3	9.7%	200.1	10.2%
China Res. Snow Breweries	117.4	6.1%	118.8	6.1%
Carlsberg	120.3	6.2%	116.9	6.0%
Molson-Coors	58.1	3.0%	95.2	4.9%
Tsingtao Brewery Group	70.5	3.6%	79.2	4.0%
Asahi	20.5	1.10%	59.0	3.0%
Yanjing	48.3	2.5%	45.0	2.3%
Kirin	43.1	2.2%	42.5	2.2%
BGI/Groupe Castel	29.8	1.5%	32.9	1.7%
Top 10 total	1,106.2	57.1%	1,223.5	62.6%

The top 3 brewing groups control 40.8% of the market share, up from 39.9% in 2014.

The top 40 brewing groups worldwide represented 83.5% market share in 2015, decreasing to 78.7% in 2016.

Source: Barth Report 2016-17

WORLD BEER PRODUCTION (FIVE YEARS - MILLION HL)

Country	2013	2014	2015	2016	2017*
Germany	94.4	95.6	95.7	95.3	95.5
Russia	88.9	76.6	73.0	86.2	85.2
Great Britain	42.4	41.2	44.1	42.4	42.1
Poland	39.6	39.2	39.8	41.5	41.5
Spain	33.1	33.5	34.8	36.3	37.8
Netherlands	23.7	23.7	23.7	24.2	24.5
Belgium	18.1	18.0	18.3	21.3	22.5
France	18.7	18.8	20.5	21.3	21.9
Czech Republic	18.6	19.7	20.1	20.6	21.1
Romania	16.6	16.5	16.1	18.3	19.1
Ukraine	27.6	24.5	19.4	17.5	15.7
Italy	12.7	13.0	15.4	14.5	14.9
Austria	9.2	9.2	9.3	9.5	9.5
Turkey	8.0	10.1	9.0	9.5	9.2
Ireland	8.0	8.0	7.3	7.9	7.9
Hungary	6.0	6.2	6.5	6.3	6.7
Other Europe	36.2	23.9	21.7	43.2	45.3
Total Europe	531.1	518.8	516.6	538.1	540.2
USA	224.6	225.9	225.0	200.6	196.6
Brazil	134.2	134.5	138.0	127.2	131.0
Mexico	82.0	82.0	90.0	109.8	116.4
Colombia	22.3	22.0	22.7	22.8	22.5
Canada	22.6	22.6	22.7	20.8	20.6
Argentina	16.8	16.3	18.1	18.0	18.0
Peru	13.5	13.5	13.7	13.9	14.1
Venezuela	22.2	22.4	21.0	12.9	8.9
Other Americas	66.2	68.1	86.4	62.8	64.4
Total Americas	572.2	574.1	592.4	568.8	570.4
P.R. China	506.0	493.0	471.6	485.1	488.6
Japan	57.2	53.9	53.8	54.3	53.9
Vietnam	32.0	35.4	39.3	40.6	43.2
India	20.0	20.0	20.5	27.4	27.6
Thailand	21.0	22.4	25.5	21.8	22.2
South Korea	19.4	20.8	18.8	20.6	20.7
Philippines	16.2	17.0	17.2	17.7	17.8
Other Asia	158.7	151.9	143.5	153.9	162.4
Total Asia	708.7	701.9	693.5	703.9	712.4
South Africa	31.5	31.5	32.1	31.6	32.3
Nigeria	25.0	27.0	27.0	15.6	16.7
Other Africa	86.4	99.6	102.6	87.3	92.5
Total Africa	127.9	141.1	144.1	128.8	134.0
Australia	17.3	16.9	16.2	16.7	16.7
New Zealand	2.9	2.8	2.8	2.8	2.9
Oceania	1.5	1.4	1.4	1.3	1.4
Total Australia	21.7	21.1	20.4	20.9	21.0
WORLD TOTALS	1,961.5	1,957.0	1,967.1	1,960.5	1,977.9

* Estimate

Source: S.S. Steiner 2017 Guidelines for Hop Buying