



# USA Hops

# 2003

*STATISTICAL REPORT*

PRESENTED: JANUARY 29, 2004  
48<sup>TH</sup> ANNUAL HGA CONVENTION  
SAN DIEGO, CALIFORNIA

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## Statistical Overview

	1993	2003	Change 93/2003	% Change 93/2003
<b>HOP PRODUCTION (POUNDS)</b>				
United States	74,560,000	54,565,100	19,994,900	-27%
Germany	93,626,000	55,115,000	38,511,000	-41%
World	304,568,000	184,164,000	120,404,000	-40%
<b>IHGC AROMA ACREAGE</b>				
United States	16,679	12,491	4,188	-25%
Germany	34,683	22,269	12,414	-36%
World	112,624	65,035	47,589	-42%
<b>IHGC ALPHA ACREAGE</b>				
United States	26,420	16,007	10,413	-39%
Germany	22,192	18,610	3,582	-16%
World	65,368	61,827	3,541	-5%
<b>IHGC TOTAL HOP ACREAGE</b>				
United States	43,099	28,669	14,430	-33%
Germany	56,875	40,879	15,996	-28%
World	177,992	126,862	51,130	-29%
<b>U.S. CROP QUALITY (%)</b>				
Leaf & Stem Content	0.75	0.08	0.670	-89%
Seed Content	0.54	0.50	0.040	-7%
<b>ALPHA ACID PRODUCTION (POUNDS)</b>				
United States	7,767,000	6,393,000	1,374,000	-18%
Germany	5,970,000	4,023,000	1,947,000	-33%
World	20,496,000	15,251,000	5,245,000	-26%
<b>ALPHA ACID CONSUMPTION (POUNDS)</b>				
WORLD	17,416,000	16,810,000	606,000	-3%
<b>BEER PRODUCTION (Million HL)</b>				
United States	202.2	235	-33	16%
China	102.3	245	-143	139%
World	1013.0	1468.4	-455	45%
<b>U.S. HOP EXPORTS (POUNDS)</b>				
Japan	1,136,000	1,091,507	44,493	-4%
Russia	0	404,989	-404,989	N/A
China + Hong Kong	374,000	2,367,100	-1,993,100	533%
Germany	9,259,000	4,287,104	4,971,896	-54%
Total	43,786,000	50,500,789	-6,714,789	15%
<b>U.S. HOP IMPORTS (POUNDS)</b>				
Germany	3,794,000	5,771,695	-1,977,695	52%
France	567,000	2,213,438	-1,646,438	290%
China	1,102,000	914,917	187,083	-17%
Total Imports	9,264,000	11,445,285	-2,181,285	24%

**U.S. HOP PRODUCTION BY STATE AND VARIETY 1999 – 2003**

STATE & VARIETY	HOP PRODUCTION (POUNDS)					2003
	1999	2000	2001	2002	2003	% +/-
<b>IDAHO</b>						
Chinook	383,900	340,000	195,200	-	-	-
Cluster	694,600	384,700	363,400	-	-	-
Galena	1,049,300	971,000	823,500	-	-	-
Mt. Hood	22,900	106,000	38,400	-	-	-
Nugget	152,500	136,000	81,000	-	-	-
Willamette	333,000	297,600	231,500	-	-	-
Zeus	397,100	824,500	893,000	-	-	-
Other Varieties	1,693,700	1,870,000	1,983,300	-	-	-
<b>Total Idaho</b>	<b>4,734,000</b>	<b>4,929,800</b>	<b>4,609,300</b>	<b>5,519,600</b>	<b>5,266,300</b>	<b>-4.60%</b>
<b>OREGON</b>						
Cascade	-	-	-	320,500	-	-
Glacier	-	-	-	-	165,800	-
Golding	153,500	134,600	2/	-	94,600	-
Liberty	-	-	-	52,800	-	-
Millennium	1/	1/	300,700	631,900	-	-
Mt. Hood	461,700	447,500	506,300	420,100	340,400	-19.0%
Nugget	4,822,700	4,989,500	5,545,300	3,996,900	3,316,400	-17.0%
Perle	542,000	454,300	665,300	525,700	461,800	-12.2%
Sterling	1/	105,700	187,900	163,000	168,400	3.3%
Willamette	3,284,200	3,318,000	3,463,600	2,921,500	3,045,000	4.2%
Other Varieties	594,700	847,800	774,100	405,600	1,755,200	332.7%
<b>Total Oregon</b>	<b>10,072,000</b>	<b>10,387,000</b>	<b>11,443,200</b>	<b>9,438,000</b>	<b>9,347,600</b>	<b>-1.0%</b>
<b>WASHINGTON</b>						
Cascade	1,821,100	1,798,800	1,790,400	2,125,600	3,833,000	80.3%
Chelan	2/	2/	573,500	652,200	458,100	-29.8%
Chinook	1,582,000	1,311,200	918,600	802,600	862,100	7.4%
Cluster	2,536,300	1,875,200	1,045,600	958,100	861,300	-10.1%
Columbus/Tomahawk	10,628,800	11,778,000	12,253,100	10,534,800	7,515,800	-28.7%
Galena	10,615,800	9,538,200	7,345,600	6,170,300	5,466,400	-11.4%
Golding	51,500	39,500	55,400	30,900	24,600	-20.4%
Hallertauer	2/	2/	73,600	90,700	46,900	-48.3%
Horizon	332,300	395,000	414,900	474,800	193,100	-59.3%
Magnum	148,500	118,000	59,800	-	-	-
Millennium	1/	2/	2,815,100	3,417,800	3,142,100	-8.1%
Mt. Hood	426,200	420,900	376,300	136,100	47,200	-65.3%
Northern Brewer	-	-	124,500	193,200	114,100	-40.9%
Nugget	8,683,700	8,522,200	8,086,500	2,698,400	1,727,700	-36.0%
Perle	292,100	215,900	226,300	120,200	95,600	-20.5%
Tettnanger	129,000	2/	63,500	61,300	-	-
Tillicum	2/	2/	677,500	402,600	451,100	12.0%
Vanguard	2/	2/	74,100	-	-	-
Willamette	4,844,200	4,888,400	4,674,400	5,025,500	4,855,100	-3.4%
YCR5 (Warrior TM)	2/	2/	2,670,100	2,099,500	2,640,500	25.8%
Zeus	3,480,800	5,381,800	5,834,400	6,779,100	6,775,000	-0.1%
Other Alpha	2,106,300	4,162,600	281,811	362,500	*	-
Other Aroma	222,000	374,000	224,542	160,800	*	-
Other	1,748,400	1,439,700	119,924	82,000	841,500	926.2%
<b>Total Washington</b>	<b>49,649,000</b>	<b>52,260,000</b>	<b>50,779,600</b>	<b>43,379,000</b>	<b>39,951,200</b>	<b>-7.9%</b>
<b>Total United States</b>	<b>64,455,000</b>	<b>67,576,800</b>	<b>66,832,100</b>	<b>58,336,600</b>	<b>54,565,100</b>	<b>-6.5%</b>

SOURCE: U.S.D.A. Prepared by HGA. – 1/ unknown or none; 2/ Included in the category "other varieties" to avoid disclosure of individual operations. \*Beginning in this report, other varieties can no longer be broken down into alpha and aroma.

**U.S. HOP ACREAGE BY STATE AND VARIETY 1999 – 2003**

STATE & VARIETY	ACRES HARVESTED					2003
	1999	2000	2001	2002	2003	% +/-
<b>IDAHO</b>						
Chinook	202	170	120	-	-	-
Cluster	417	198	234	-	-	-
Galena	625	535	552	-	-	-
Mt. Hood	32	53	32	-	-	-
Nugget	89	68	54	-	-	-
Willamette	248	194	215	-	-	-
Zeus	201	403	477	-	-	-
Other Varieties	1,541	1,700	1,785	-	-	-
<b>Total Idaho</b>	<b>3,362</b>	<b>3,321</b>	<b>3,469</b>	<b>3,399</b>	<b>3,429</b>	<b>0.9%</b>
<b>OREGON</b>						
Cascade	-	-	-	217	-	-
Glacier	*	-	-	-	245	-
Golding	110	115	2/	-	95	-
Liberty	-	-	-	36	-	-
Millennium	1/	1/	117	421	-	-
Mt. Hood	253	250	257	243	217	-10.7%
Nugget	2,153	2,308	2,268	1,967	1,529	-22.3%
Perle	406	402	491	452	450	-0.4%
Sterling	1/	62	91	86	84	-2.3%
Willamette	2,321	2,142	2,434	1,912	2,224	16.3%
Other Varieties	393	460	445	243	904	272.0%
<b>Total Oregon</b>	<b>5,822</b>	<b>5,819</b>	<b>6,103</b>	<b>5,577</b>	<b>5,748</b>	<b>3.1%</b>
<b>WASHINGTON</b>						
Cascade	906	996	1,003	1,216	2,120	74.3%
Chelan	2/	2/	317	295	180	-39.0%
Chinook	791	670	535	422	453	7.3%
Cluster	1,321	939	534	480	430	-10.4%
Columbus/Tomahawk	4,374	4,594	4,915	3,663	2,738	-25.3%
Galena	5,282	5,044	4,375	3,239	2,856	-11.8%
Golding	35	36	45	26	22	-15.4%
Hallertauer	2/	2/	76	76	53	-30.3%
Horizon	268	316	339	337	135	-59.9%
Magnum	99	73	42	-	-	-
Millennium	1/	2/	1,382	1,455	1,386	-4.7%
Mt. Hood	384	367	333	97	32	-67.0%
Northern Brewer	-	-	97	107	65	-39.3%
Nugget	4,195	4,597	4,109	1,288	918	-28.7%
Perle	273	275	209	124	104	-16.1%
Tettnanger	129	-	60	48	-	-
Tillicum	2/	2/	369	194	194	0.0%
Vanguard	2/	2/	54	-	-	-
Willamette	3,364	3,563	3,571	3,639	3,645	0.2%
YCR5 (Warrior TM)	2/	2/	1,370	988	1,242	25.7%
Zeus	1,520	1,994	2,186	2,265	2,333	3.0%
Other Alpha	1,048	2,363	157	203	*	-
Other Aroma	206	330	163	120	*	-
Other	881	824	98	51	586	1049.0%
<b>Total Washington</b>	<b>25,076</b>	<b>26,980</b>	<b>26,339</b>	<b>20,333</b>	<b>19,492</b>	<b>-4.1%</b>
<b>Total United States</b>	<b>34,260</b>	<b>36,120</b>	<b>35,911</b>	<b>29,309</b>	<b>28,669</b>	<b>-2.2%</b>

SOURCE: U.S.D.A. Prepared by HGA. – 1/ unknown or none; 2/ Included in the category "other varieties" to avoid disclosure of individual operations. \*Beginning in this report, other varieties can no longer be broken down into alpha and aroma.

**U.S. HOP YIELDS BY STATE AND VARIETY 1999 – 2003**

STATE & VARIETY	YIELDS (POUNDS PER ACRE)					2003
	1999	2000	2001	2002	2003	% +/-
<b>IDAHO</b>						
Chinook	1,900	2,000	1,627	-	-	-
Cluster	1,666	1,943	1,553	-	-	-
Galena	1,679	1,815	1,492	-	-	-
Mt. Hood	716	2,000	1,200	-	-	-
Nugget	1,713	2,000	1,500	-	-	-
Willamette	1,343	1,534	1,077	-	-	-
Zeus		2,046	1,872	-	-	-
Other Varieties	1,099	1,100	1,111	-	-	-
<b>Total Idaho</b>	<b>1,408</b>	<b>1,484</b>	<b>1,329</b>	<b>1,624</b>	<b>1,536</b>	<b>-5.4%</b>
<b>OREGON</b>						
Cascade	-	-	-	1,477	-	-
Glacier	*	*	*	-	677	-
Golding	1,395	1,170	2/	-	996	-
Liberty	-	-	-	1,467	-	-
Millennium	1/	1/	2,570	1,501	-	-
Mt. Hood	1,825	1,790	1,970	1,729	1,569	-9.3%
Nugget	2,240	2,162	2,445	2,032	2,169	6.7%
Perle	1,335	1,130	1,355	1,163	1,026	-11.8%
Sterling	1/	1,705	2,065	1,895	2,005	5.8%
Willamette	1,415	1,549	1,423	1,528	1,369	-10.4%
Other Varieties	1,513	1,843	1,740	1,669	1,942	16.4%
<b>Total Oregon</b>	<b>1,730</b>	<b>1,785</b>	<b>1,875</b>	<b>1,692</b>	<b>1,626</b>	<b>-3.9%</b>
<b>WASHINGTON</b>						
Cascade	2,010	1,806	1,785	1,748	1,808	3.4%
Chelan	2/	2/	1,809	2,211	2,545	15.1%
Chinook	2,000	1,957	1,717	1,902	1,903	0.1%
Cluster	1,920	1,997	1,958	1,996	2,003	0.4%
Columbus/Tomahawk	2,430	2,564	2,493	2,876	2,745	-4.6%
Galena	2,010	1,891	1,679	1,905	1,914	0.5%
Golding	1,470	1,098	1,231	1,188	1,118	-5.9%
Hallertauer	2/	2/	968	1,193	885	-25.8%
Horizon	1,240	1,250	1,224	1,409	1,430	1.5%
Magnum	1,500	1,616	1,424	-	-	-
Millennium	2/	2/	2,037	2,349	2,267	-3.5%
Mt. Hood	1,100	1,147	1,130	1,272	1,475	16.0%
Northern Brewer	-	-	1,284	1,992	1,755	-11.9%
Nugget	2,070	1,854	1,968	2,095	1,882	-10.2%
Perle	1,070	785	1,083	969	919	-5.2%
Tettnanger	1,000	-	1,058	1,277	-	-
Tillicum	2/	2/	1,836	2,075	2,325	12.0%
Vanguard	2/	2/	1,372	-	-	-
Willamette	1,440	1,372	1,309	1,381	1,332	-3.5%
YCR5 (Warrior TM)	2/	2/	1,949	2,125	2,126	0.0%
Zeus	2,290	2,699	2,669	2,993	2,904	-3.0%
Other Alpha	2,010	2,050	1,648	1,619	*	-
Other Aroma	1,078	1,134	1,378	1,340	*	-
Other	1,985	1,748	1,224	1,610	1,436	-10.8%
<b>Total Washington</b>	<b>1,980</b>	<b>1,937</b>	<b>1,928</b>	<b>2,133</b>	<b>2,050</b>	<b>-3.9%</b>
<b>Total United States</b>	<b>1,884</b>	<b>1,871</b>	<b>1,861</b>	<b>1,990</b>	<b>1,903</b>	<b>-4.4%</b>

SOURCE: U.S.D.A. Prepared by HGA. – 1/ unknown or none; 2/ Included in the category "other varieties" to avoid disclosure of individual operations. \*Beginning in this report, other varieties can no longer be broken down into alpha and aroma.

**U.S. HOP ACREAGE BY STATE 1993 – 2003 (IN ACRES)**

YEAR	WASHINGTON	OREGON	IDAHO	TOTAL
1993	31,239	7,900	3,961	43,100
1994	30,375	8,000	4,037	42,412
1995	30,621	8,641	3,927	43,189
1996	31,678	8,486	3,997	44,161
1997	31,080	8,352	3,870	43,302
1998	26,573	6,161	3,909	36,643
1999	25,076	5,822	3,362	34,260
2000	26,980	5,819	3,321	36,120
2001	26,339	6,103	3,469	35,911
2002	20,333	5,577	3,399	29,309
2003	19,492	5,748	3,429	28,669

SOURCE: USDA. Prepared by HGA

**U.S. AVERAGE HOP YIELDS 1993 - 2003**

YEAR	POUNDS PER ACRE			
	WASHINGTON	OREGON	IDAHO	TOTAL U.S.
1993	1,884	1,500	1,375	1,767
1994	1,800	1,715	1,527	1,758
1995	1,930	1,595	1,520	1,826
1996	1,820	1,383	1,400	1,698
1997	1,796	1,625	1,417	1,729
1998	1,686	1,660	1,159	1,625
1999	1,980	1,730	1,408	1,884
2000	1,937	1,785	1,484	1,871
2001	1,928	1,875	1,329	1,861
2002	2,133	1,692	1,624	1,990
2003	2,050	1,626	1,536	1,903

SOURCE: USDA. Prepared by HGA

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

Marketing Year	SEASON AVERAGE PRICE				U.S. Production (Pounds x 1,000)	Total Crop Value (x 1,000)
	Washington	Oregon	Idaho	U.S.		
	----- (\$ / pound) -----					
1988	\$1.36	\$1.64	\$1.09	\$1.40	54,696	\$76,415
1989	\$1.33	\$1.58	\$1.26	\$1.38	59,326	\$81,583
1990	\$1.44	\$1.63	\$1.50	\$1.48	56,855	\$84,178
1991	\$1.68	\$1.71	\$1.59	\$1.68	69,155	\$115,997
1992	\$1.72	\$1.86	\$1.69	\$1.74	74,337	\$129,096
1993	\$1.72	\$1.95	\$1.77	\$1.76	76,144	\$133,965
1994	\$1.77	\$1.96	\$1.79	\$1.81	74,560	\$134,701
1995	\$1.68	\$1.90	\$1.61	\$1.71	78,852	\$135,087
1996	\$1.63	\$1.81	\$1.49	\$1.65	74,970	\$123,530
1997	\$1.60	\$1.68	\$1.41	\$1.60	74,872	\$119,840
1998	\$1.64	\$1.98	\$1.55	\$1.69	59,548	\$100,728
1999	\$1.63	\$2.04	\$1.61	\$1.69	64,455	\$109,099
2000	\$1.82	\$2.19	\$1.78	\$1.87	67,576	\$126,217
2001	\$1.81	\$2.15	\$1.59	\$1.91	66,832	\$123,843
2002	\$1.95	\$2.13	\$1.58	\$1.94	58,336	\$113,413
2003	\$1.91	\$2.32	\$1.62	\$1.90	54,565	\$103,727

SOURCE: USDA. Prepared by HGA



**2003 HOP INSPECTION REPORT**

TABLE 1. Total Number of Bales Inspected – Weighted Average of Leaf &amp; Stem in Parenthesis

YEAR	WASHINGTON (%)	OREGON (%)	IDAHO (%)	TOTAL (%)
1999	235,356 (0.06)	50,281 (0.21)	21,729 (0.05)	307,366 (0.08)
2000	249,607 (0.11)	52,163 (0.23)	22,851 (0.01)	324,621 (0.12)
2001	250,454 (0.08)	57,321 (0.14)	22,568 (0.04)	330,343 (0.09)
2002	213,676 (0.07)	47,190 (0.32)	27,289 (0.04)	288,155 (0.11)
2003	194,751 (0.07)	46,738 (0.12)	25,802 (0.02)	267,291 (0.08)

TABLE 2. Number of Bales in Each Leaf &amp; Stem Category

	0%	1%	2%	3%	4%	5%	6%	7%	TOTAL
WA	181,519	12,649	583	0	0	0	0	0	194,751
OR	41,601	4,603	534	0	0	0	0	0	46,738
ID	25,209	593	0	0	0	0	0	0	25,802
Total	248,329	17,845	1,117	0	0	0	0	0	267,291
% of Total	93	7	<1	0	0	0	0	0	100

TABLE 3. Number of Bales in Each Seed Category

	0%	1%	2%	3%	4%	5%	6%	7+%	TOTAL
WA	156,413	22,001	7,514	4,240	2,955	1,320	308	0	194,751
OR	25,487	8,515	5,208	2,725	1,787	1,302	317	1,427	46,768
ID	25,162	400	200	40	0	0	0	0	25,802
Total	207,062	30,916	12,922	7,005	4,742	2,622	625	1,427	267,291
% of Total	77	12	5	3	2	1	<1	1	100

SOURCE: USDA. GIPSA. Federal Grain Inspection Service

**U.S. HOP LEAF, STEM & SEED CONTENT PERCENTAGE 1993 – 2003**

Year	WASHINGTON	OREGON	IDAHO	U.S. AVERAGE %	
	Leaf & Stem	Leaf & Stem	Leaf & Stem	Leaf & Stem	Seed Content
1993	0.71	1.16	0.87	0.79	0.91
1994	0.62	1.12	0.99	0.75	0.54
1995	0.73	1.02	0.97	0.80	0.62
1996	0.48	1.14	0.69	0.60	0.55
1997	0.52	0.64	0.66	0.55	1.15
1998	0.11	0.21	0.09	0.12	0.54
1999	0.06	0.21	0.05	0.08	1.15
2000	0.11	0.23	0.01	0.12	1.18
2001	0.08	0.14	0.04	0.09	1.06
2002	0.07	0.32	0.04	0.11	0.63
2003	0.07	0.12	0.02	0.08	0.50

SOURCE: USDA Federal Grain Inspection Service. Prepared by HGA

**IHGC AROMA ACREAGE 1999 – 2003**

COUNTRY	AROMA ACREAGE (IN ACRES)					2003 % +/-
	1999	2000	2001	2002	2003	
Australia	10	9	7	7	7	0.0%
Belgium	199	185	126	158	84	-46.8%
Bulgaria	N/A	222	222	190	178	-6.3%
China	237	237	464	464	464	0.0%
Czech Rep.	14,614	14,693	13,825	13,662	13,980	2.3%
Germany	26,202	25,612	25,360	24,309	22,269	-8.4%
France	1,802	1,809	1,837	1,886	1,857	-1.5%
New Zealand	387	429	452	484	580	19.8%
Poland	3703	3,580	3,333	2,647	2,222	-16.1%
Portugal	0	0	0	0	0	-
Russia	3,111	2,681	1,741	1,363	869	-36.2%
Slovakia	864	864	864	864	864	0.0%
Slovenia	4,214	4,138	3,857	4,005	3,699	-7.6%
Spain	0	0	0	0	0	-
UK - England	3,246	2,797	2,896	2,647	2,094	-20.9%
Ukraine	2,380	2,370	2,617	2,160	2,560	18.5%
USA	10,928	10,807	10,756	10,931	12,491	14.3%
Serbia - Montenegro	449	321	321	321	321	0.0%
South Africa	0	0	0	0	0	-
Austria	No Data	No Data	0	519	494	-4.8%
<b>IHGC Total</b>	<b>72,346</b>	<b>70,754</b>	<b>68,679</b>	<b>66,617</b>	<b>65,035</b>	<b>-2.4%</b>

SOURCE: IHGC November 2003 Report

Numbers may not total exactly due to rounding and standard/metric conversions.

**IHGC ALPHA ACREAGE 1999 – 2003**

COUNTRY	ALPHA ACREAGE (IN ACRES)					2003 % +/-
	1999	2000	2001	2002	2003	
Australia	2,069	1,997	1,923	2,072	1,077	-48.0%
Belgium	428	427	457	459	449	-2.2%
Bulgaria	N/A	641	679	400	368	-8.0%
China	10,133	10,592	11,160	12,314	13,467	9.4%
Czech Rep.	177	355	417	304	437	43.8%
Germany	17,459	17,995	18,780	18,820	18,610	-1.1%
France	133	125	123	109	86	-21.1%
New Zealand	501	511	521	519	472	-9.1%
Poland	1,728	1,851	2,099	2,778	3,284	18.2%
Portugal	158	103	94	91	91	0.0%
Russia	938	1,079	778	612	612	0.0%
Slovakia	0	0	0	0	0	-
Slovenia	74	172	235	247	259	4.9%
Spain	1,962	1,906	1,906	1,802	1,802	0.0%
UK - England	2,054	1,859	1,790	1,790	1,444	-19.3%
Ukraine	647	740	840	980	1,494	52.4%
USA	23,330	25,597	24,541	18,146	16,007	-11.8%
Serbia - Montenegro	990	792	793	741	602	-18.8%
South Africa	1,214	1,172	1,205	1,220	1,242	1.8%
Austria	No Data	No Data	0	17	22	29.4%
<b>IHGC Total</b>	<b>63,995</b>	<b>67,914</b>	<b>68,341</b>	<b>63,420</b>	<b>61,827</b>	<b>-2.5%</b>

SOURCE: IHGC November 2003 Report

Numbers may not total exactly due to rounding and standard/metric conversions.

**IHGC TOTAL ACREAGE 1999 – 2003**

COUNTRY	TOTAL ACREAGE (IN ACRES)					2003 % +/-
	1999	2000	2001	2002	2003	
Australia	2,079	2,007	1,931	2,128	1,084	-49.1%
Belgium	627	612	602	617	533	-13.6%
Bulgaria	741	864	938	590	546	-7.5%
China	10,370	10,829	11,884	13,930	13,931	0.0%
Czech Rep.	15,735	15,839	15,000	14,735	14,417	-2.2%
Germany	45,181	45,915	46,965	45,318	40,879	-9.8%
France	2,012	2,011	2,015	2,009	1,943	-3.3%
New Zealand	888	940	973	1,002	1,052	5.0%
Poland	5,432	5,432	5,556	5,424	5,506	1.5%
Portugal	158	103	94	91	91	0.0%
Russia	4,152	3,918	2,716	2,128	1,481	-30.4%
Slovakia	864	864	864	864	864	0.0%
Slovenia	4,500	4,614	4,462	4,484	3,958	-11.7%
Spain	2,085	2,029	1,906	1,802	1,802	0.0%
UK - England	5,301	4,828	5,035	4,681	3,538	-24.4%
Ukraine	3,293	4,098	4,642	4,390	4,054	-7.7%
USA	34,260	36,404	35,891	29,293	28,499	-2.7%
Serbia - Montenegro	1,439	1,137	1,185	1,217	923	-24.2%
South Africa	1,214	1,172	1,235	1,234	1,242	0.6%
Austria	No Data	No Data	563	555	516	-7.0%
<b>IHGC Total</b>	<b>140,331</b>	<b>143,616</b>	<b>144,457</b>	<b>135,944</b>	<b>126,862</b>	<b>-6.7%</b>

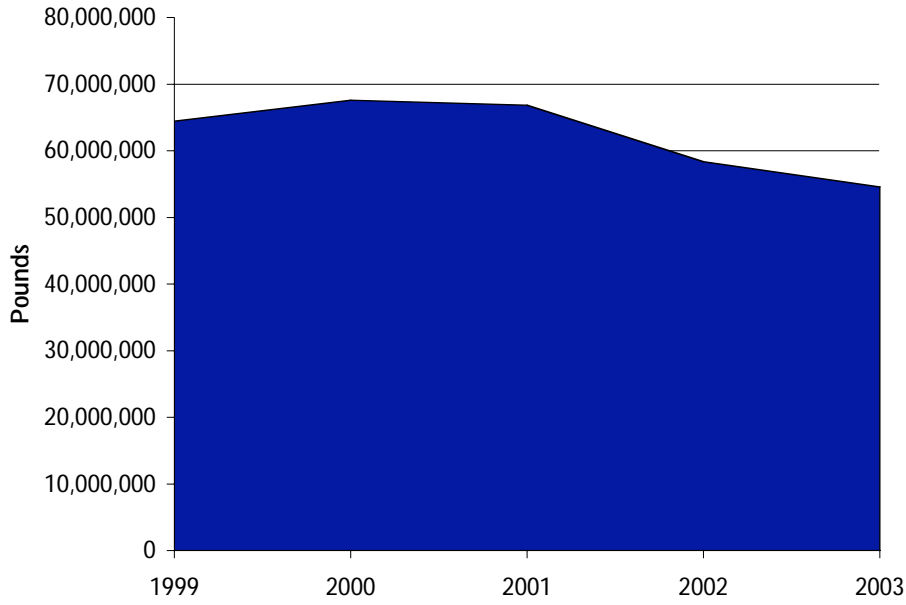
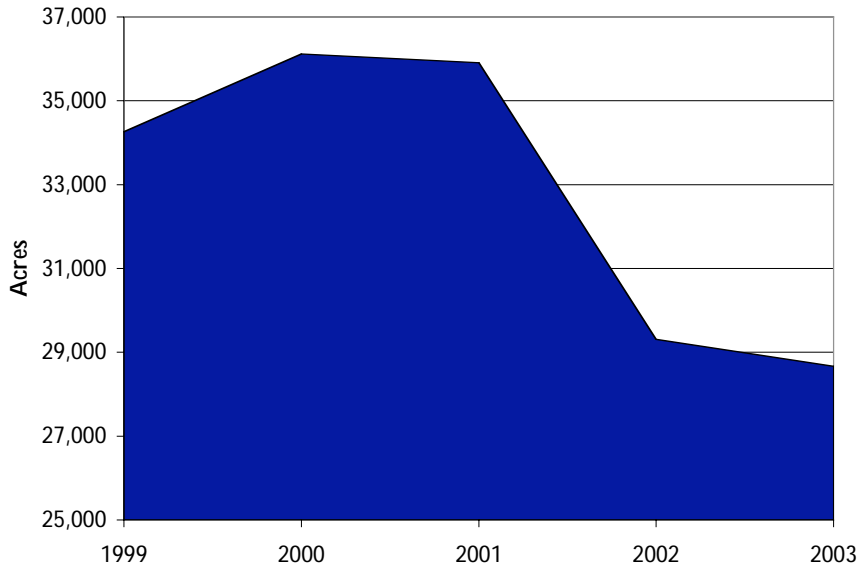
SOURCE: IHGC November 2003, 2002, 2000, 1999 Reports, IHGC Total Acreage includes baby acreage (not included in separate aroma and alpha tables. Numbers may not total exactly due to rounding and standard/metric conversions.

**2003 WORLD HOP ACREAGE AND PRODUCTION**

COUNTRY	HOP ACREAGE (acres)				HOP PRODUCTION (pounds)			
	AROMA	ALPHA	TOTAL	NEW	AROMA	ALPHA	TOTAL	Alpha MT.
Australia	7	1,077	1,084	0	7	2,798	2,804	157
Belgium	84	449	533	0	88	838	926	35
Bulgaria	178	368	546	0	204	48	251	29
China	464	13,467	13,931	1,235	637	30,024	30,662	937
Czech Rep.	13,980	437	14,417	254	10,496	723	11,219	160
Germany	22,269	18,610	40,879	2,486	25,353	29,762	55,115	1,825
France	1,857	86	1,943	72	2,906	157	3,062	29
New Zealand	580	472	1,052	0	886	836	1,722	87
Poland	2,222	3,284	5,506	0	1,984	3,307	5,291	141
Portugal	0	91	91	0	0	126	126	6
Russia	869	612	1,481	74	428	278	705	15
Slovakia	864	0	864	0	827	0	827	12
Slovenia	3,699	259	3,958	121	2,039	388	2,427	69
Spain	0	1,802	1,802	0	0	2,690	2,690	133
UK - England	2,094	1,444	3,538	128	2,520	1,682	4,202	160
Ukraine	2,560	1,494	4,054	847	1,803	1,063	2,866	66
USA	12,491	16,007	28,499	0	18,607	35,432	54,039	2,900
Serbia - Montenegro	321	602	923	0	186	398	584	13
South Africa	0	1,242	1,242	12	2,007	2,007	4,013	125
Austria	494	22	516	0	602	31	633	19
<b>2003 IHGC Totals</b>	<b>65,035</b>	<b>61,827</b>	<b>126,862</b>	<b>5,230</b>	<b>71,579</b>	<b>112,585</b>	<b>184,164</b>	<b>6,918</b>

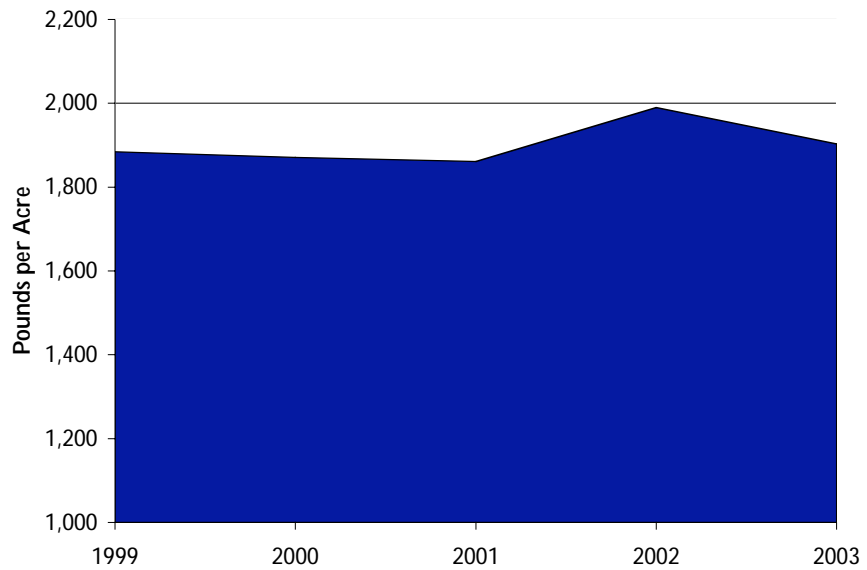
SOURCE: November 2003 IHGC Report. Numbers may not total exactly due to rounding and standard/metric conversions.

U.S. TOTAL  
ACREAGE  
1999 - 2003

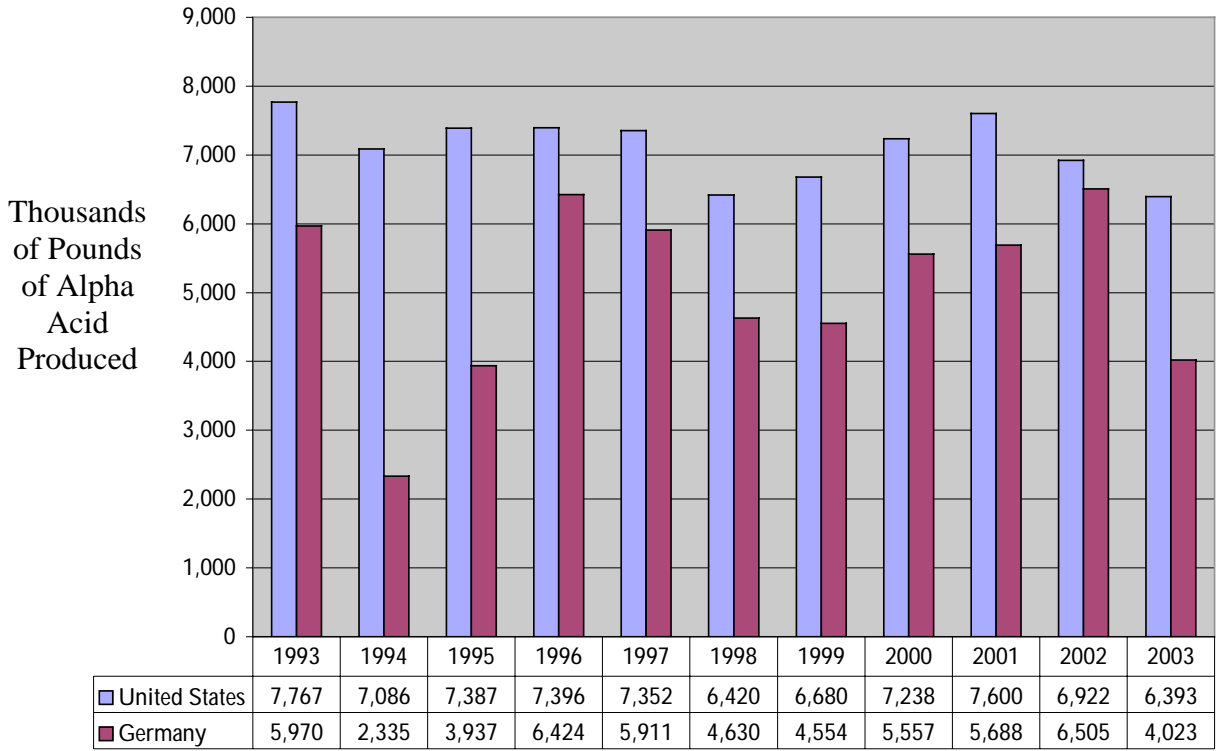


U.S. TOTAL  
PRODUCTION  
1999 - 2003

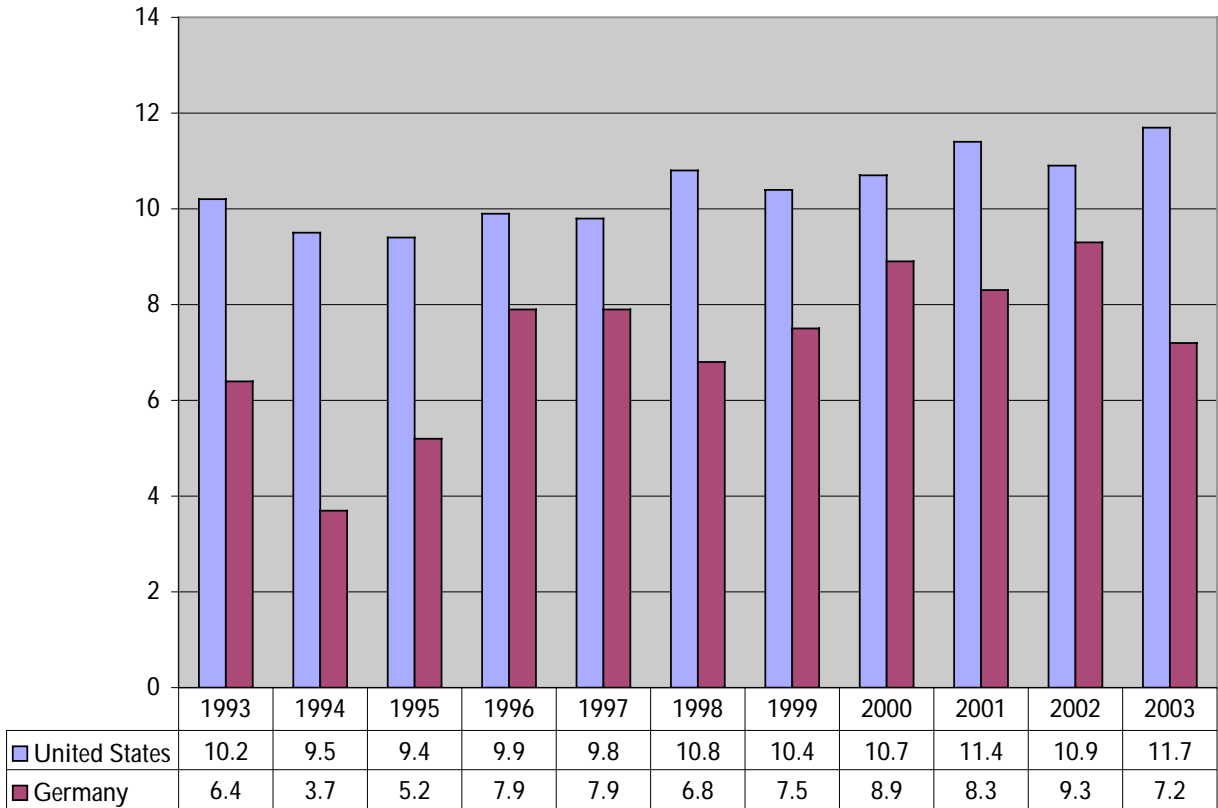
U.S.  
AVERAGE  
YIELD  
PER ACRE  
1999 - 2003



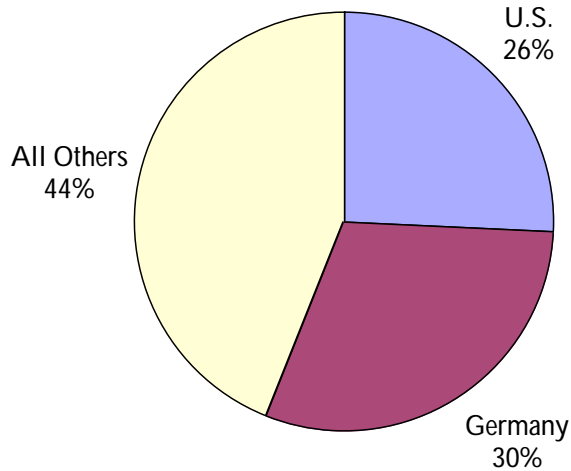
U.S. and German Alpha Acid Production 1993 - 2003



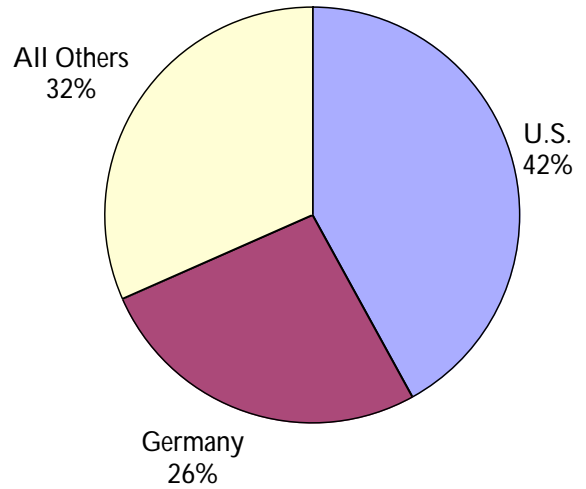
U.S. and German Average Alpha Acid Percentage 1993 - 2003



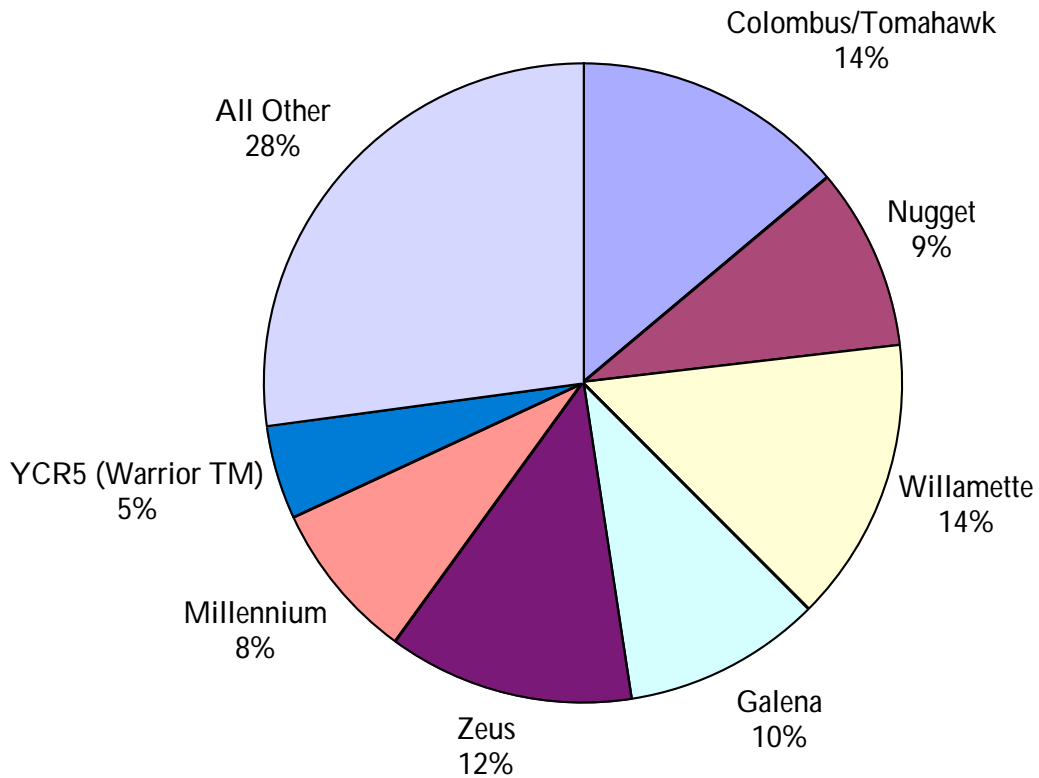
U.S. & GERMAN 2003 ALPHA ACREAGE & THE % OF WORLD ALPHA ACREAGE THEY REPRESENT



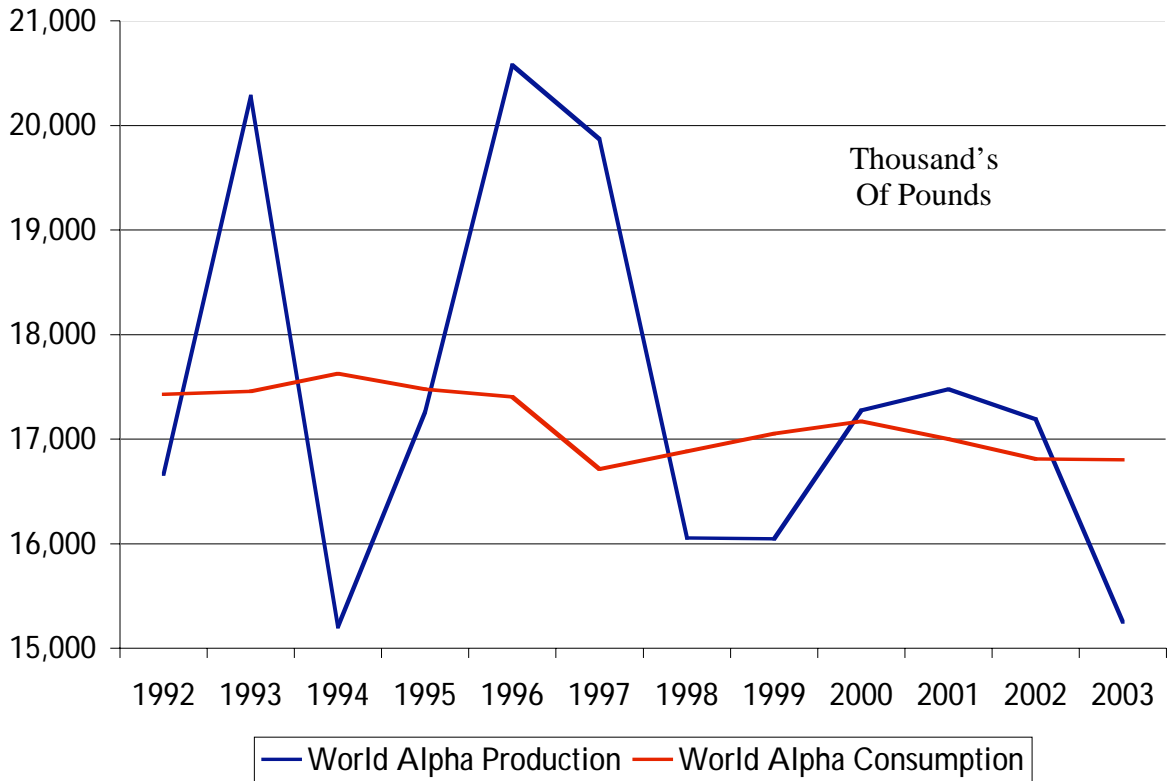
U.S. & GERMAN 2003 ALPHA PRODUCTION & THE % OF WORLD ALPHA PRODUCTION THEY REPRESENT



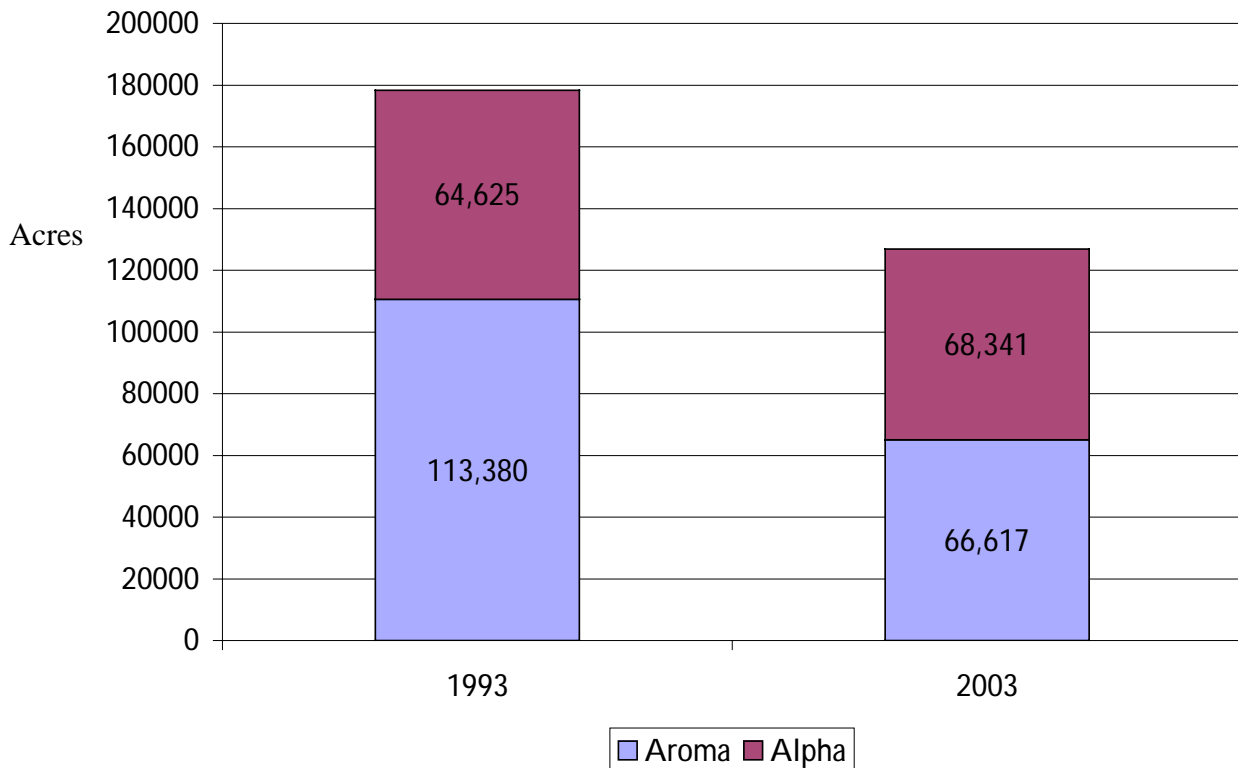
TOP 7 VARIETIES PRODUCED IN THE U.S. AND THE % OF THE CROP THEY REPRESENT



**WORLD ALPHA PRODUCTION TREND VERSUS  
WORLD ALPHA CONSUMPTION TREND 1993-2003**



**COMPOSITION OF WORLD HOP ACREAGE  
1993 VERSUS 2003 (IN ACRES)**



**IHGC SOLD AHEAD SURVEY 2003 – 2008 (as reported in November 2003)**

COUNTRY	(Pounds contracted, % based on 2003 production)						
	2003 Production (Pounds)	2003	2004	2005	2006	2007	2008 & Beyond
Australia	2,804,000	No Data	No Data	No Data	No Data	No Data	No Data
Belgium	926,000	97,002	83,774	0	0	No Data	No Data
Bulgaria	251,000	418,874	418,874	418,874	No Data	No Data	No Data
China	30,662,000	19,841,400	No Data	No Data	No Data	No Data	No Data
Czech Rep.	11,219,000	11,219,209	8,975,367	6,170,564	No Data	No Data	No Data
Germany	55,115,000	41,446,480	31,525,780	25,573,360	14,550,360	7,495,640	5,070,580
France	3,062,000	2,678,589	423,283	425,487	No Data	No Data	No Data
New Zealand	1,722,000	1,560,856	1,560,856	1,267,645	881,840	No Data	No Data
Poland	5,291,000	4,629,660	4,629,660	No Data	No Data	No Data	No Data
Portugal	126,000	99,207	99,207	No Data	No Data	No Data	No Data
Russia	705,000	0	0	No Data	No Data	No Data	No Data
Slovakia	827,000	826,725	661,380	661,380	No Data	No Data	No Data
Slovenia	2,427,000	4,537,066	2,546,313	2,083,347	925,932	No Data	No Data
Spain	2,690,000	2,810,865	2,810,865	No Data	No Data	No Data	No Data
UK – England	4,202,000	5,594,062	3,533,091	2,944,243	588,848	No Data	No Data
Ukraine	2,866,000	No Data	No Data	No Data	No Data	No Data	No Data
USA*	54,039,000	40,378,174	26,736,899	18,552,134	9,821,718	No Data	No Data
Serbia - Montenegro	584,000	No Data	No Data	No Data	No Data	No Data	No Data
South Africa	4,013,000	2,006,626	No Data	No Data	No Data	No Data	No Data
Austria	633,000	584,219	584,219	573,196	573,196	No Data	No Data
<b>TOTAL IHGC</b>	<b>184,164,000</b>	<b>138,729,014</b>	<b>84,589,568</b>	<b>58,670,230</b>	<b>27,341,894</b>	<b>7,495,640</b>	<b>5,070,580</b>
IHGC Contracted	-	75.3%	45.9%	31.9%	14.8%	4.1%	2.8%

SOURCE: IHGC. USDA. Prepared by HGA, -/ information not reported to IHGC

Numbers may not total exactly due to rounding and standard/metric conversions.

\* Information originally reported in Sold Ahead Survey, March 2002, U.S. production estimate updated to reflect actuals.

**U.S. ADJUSTED SOLD AHEAD SURVEY RESULTS 1999 - 2003**

REPORT YEAR (2003)	REPORT YEAR PRODUCTION	Percent Sold Ahead Based on Report Year Production				
		N	N+1	N+2	N+3	N+4
1999	64,455,000	81%	63%	42%	32%	10%
2000	67,576,800	90%	64%	43%	32%	12%
2001	66,832,100	72%	45%	35%	25%	4%
2002	58,336,600	76%	56%	33%	25%	3%
2003	54,565,100	74%	49%	34%	18%	N/A

- The U.S. Sold Ahead survey was issued in March 2003 using crop production figures from the previous year (in this case 2002). In hindsight, to provide a more accurate picture of the actual percentage of the crop contracted, these figures must be adjusted once the current year's production has been measured.
- The U.S. Sold Ahead percentages listed above include both alpha and aroma hops. Aroma varieties are typically contracted at a much higher level than alpha hops.



**WORLD HOP ACREAGE & PERCENT SHARE (acres)**

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Germany	54,189 25%	54,078 25%	53,897 26%	52,830 30%	48,638 33%	45,177 32%	45,915 32%	46,965 33%	45,318 33%	40,879 32%
England	7,863 4%	7,781 4%	7,843 4%	7,764 4%	6,047 4%	5,636 4%	4,828 3%	5,035 3%	4,681 3%	3,538 3%
Czech	28,169 13%	27,601 13%	25,587 13%	20,411 12%	15,091 10%	15,842 11%	16,703 12%	15,864 11%	14,735 11%	14,417 11%
Europe (rest)	52,541 24%	48,674 23%	41,500 20%	32,447 18%	25,840 17%	24,844 17%	25,682 18%	24,679 17%	23,616 17%	22,217 18%
USA	42,412 19%	43,189 20%	44,161 22%	43,301 24%	36,673 25%	34,260 24%	36,404 25%	35,891 25%	29,309 22%	28,669 23%
China	19,800 9%	17,300 8%	16,300 8%	12,355 7%	10,556 7%	10,556 7%	10,829 7%	11,884 8%	13,930 10%	13,931 11%
World (rest)	14,677 7%	14,557 7%	14,250 7%	7,645 4%	6,577 4%	6,530 5%	3,255 2%	4,139 3%	4,364 3%	3,211 3%
World Totals	219,651	213,180	203,538	176,753	149,422	142,845	143,616	144,457	135,944	126,862

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

COUNTRY	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Germany	62,687 24%	75,224 27%	81,571 29%	74,957 30%	68,166 33%	60,462 29%	62,709 30%	68,343 32%	69,444 34%	55,115 30%
England	10,709 4%	9,106 3%	11,250 4%	9,433 4%	7,209 3%	6,945 3%	6,082 3%	6,019 3%	5,849 3%	4,202 2%
Czech	22,642 9%	24,136 9%	24,141 9%	18,105 7%	11,751 6%	14,771 7%	10,815 5.1%	14,669 7%	13,668 7%	11,219 6%
Europe (rest)	40,258 15%	41,235 15%	35,819 13%	29,533 12%	24,857 12%	25,904 13%	23,174 11%	22,704 11%	18,178 9%	20,388 11%
USA	74,560 28%	78,852 28%	74,971 27%	74,872 30%	59,548 29%	64,455 31%	67,576 32%	66,832 31%	58,336 28%	54,565 30%
China	38,500 15%	35,275 13%	35,274 13%	26,786 11%	26,581 13%	26,455 13%	33,152 15%	29,786 14%	31,224 15%	30,662 17%
World (rest)	12,700 5%	17,762 6%	17,538 6%	12,566 5%	8,823 4%	7,685 4%	7,937 4%	8,114 4%	9,332 5%	8,013 4%
World Totals	262,056	281,590	280,563	246,252	206,935	206,677	211,445	215,639	206,031	184,164

SOURCE: USDA, IHGC, Merchant Reports. Prepared by HGA

**MARCH 1 & SEPTEMBER 1 U.S. HOP STOCKS 1985 – 2003**

Year	MARCH 1			SEPTEMBER 1		
	Brewer	Dealer / Grower	TOTAL	Brewer	Dealer / Grower	TOTAL
1985	72,949	16,856	89,805	58,130	10,930	70,460
1986	72,240	17,680	89,920	60,630	8,930	70,950
1987	72,860	15,640	88,500	62,430	6,580	70,630
1988	66,980	15,590	82,570	49,090	9,160	60,000
1989	56,630	23,870	80,500	43,200	8,500	51,700
1990	57,850	18,790	76,640	46,810	5,080	51,890
1991	56,950	18,370	75,320	45,200	9,000	54,200
1992	55,470	17,860	73,330	46,270	9,980	56,250
1993	55,800	27,200	83,000	45,520	12,540	58,060
1994	58,200	32,600	90,800	47,070	15,930	63,000
1995	57,900	31,400	89,300	42,800	13,100	55,900
1996	55,900	25,500	81,400	47,000	11,700	58,700
1997	53,000	26,000	79,000	44,500	17,500	62,000
1998	50,500	25,000	75,500	41,000	14,000	55,000
1999	50,000	25,000	75,000	39,500	14,500	54,000
2000	43,500	21,000	64,500	37,500	10,500	48,000
2001	44,500	22,500	67,000	38,000	16,000	54,000
2002	45,000	44,000	89,000	30,000	35,000	65,000
2003	41,000	41,000	82,000	34,000	35,000	69,000

SOURCE: USDA NASS. Prepared by HGA.

-/ included in dealer stocks to avoid disclosure of individual operations.

**U.S. HOP TRADE BALANCE 1993 - 2003**

Year	Value of Hop Imports <sup>1</sup>	Value of U.S. Hop Exports <sup>2</sup>	TRADE SURPLUS
	----- (x US\$1.000) -----		
1992-93	\$23,661	\$108,275	\$84,614
1993-94	\$40,668	\$98,400	\$57,732
1994-95	\$41,415	\$126,400	\$84,985
1995-96	\$41,856	\$105,304	\$63,448
1996-97	\$39,232	\$99,245	\$60,013
1997-98	\$29,273	\$97,603	\$68,330
1998-99	\$28,733	\$77,615	\$48,882
1999-00	\$28,916	\$89,623	\$60,707
2000-01	\$21,874	\$121,315	\$99,441
2001-02	\$24,060	\$97,912	\$73,852
2002-03	\$31,803	\$89,301	\$57,498

SOURCE USDA Hop Market News. Prepared by HGA

1/ Import price is defined generally as market value in foreign country excluding import duties, ocean freight and marine insurance

2/ Export price is value of exportation based on selling price, inland freight, insurance and other charges to port.

**U.S. & GERMAN ALPHA ACID PRODUCTION 1993–2003**

YEAR	UNITED STATES		GERMANY	
	Pounds** (x 1,000)	Avg Alpha*	Pounds (x 1,000)	Avg. Alpha
1993	7,767	10.2	5,970	6.4
1994	7,086	9.5	2,335	3.7
1995	7,387	9.4	3,937	5.2
1996	7,396	9.9	6,424	7.9
1997	7,352	9.8	5,911	7.9
1998	6,420	10.8	4,630	6.8
1999	6,680	10.4	4,554	7.5
2000	7,238	10.7	5,557	8.9
2001	7,600	11.4	5,688	8.3
2002	6,922	10.9	6,505	9.3
2003	6,393	11.7	4,023	7.2

SOURCE: Hop Merchants. Prepared by HGA. \* U.S. figures were converted to comparable EBC October/November figures for more accurate comparison by making an 8% adjustment downward in alpha values. Average figures calculated by taking total alpha produced divided by total pounds produced. U.S. and German figures from 1998-2000 have been revised using this method. \*\*All figures are total production, which includes estimates of alpha acid produced but later destroyed by fire.

**WORLD ALPHA PRODUCTION & CONSUMPTION**

ALPHA PRODUCTION			ALPHA CONSUMPTION (thousands of pounds)			Estimated Accumulated Surplus/Deficit Worldwide** (thousands of pounds)
Pounds (x 1,000)			Alpha Dosage	Alpha	Surplus/ Deficit	
Year	World Total	Year	grams alpha / hl	Consumption*		
1992	16,666	1993	6.5	17,427	-762	-1,164
1993	20,278	1994	6.3	17,458	2,820	1,656
1994	15,207	1995	6.2	17,627	-2,420	-764
1995	17,260	1996	6.0	17,475	-215	-979
1996	20,576	1997	5.7	17,403	3,172	2,194
1997	19,867	1998	5.6	16,715	3,151	5,345
1998	16,055	1999	5.5	16,882	-827	4,518
1999	16,045	2000	5.5	17,054	-1,009	3,290
2000	17,273	2001	5.5	17,171	103	2,798
2001	17,478	2002	5.4	17,000	478	3,276
2002	17,190	2003	5.3	16,810	380	3,656
2003	15,251	2004	5.2	16,803	-1,552	2,104

SOURCE: IHGC, 2003 Hop Merchant Reports, Prepared by HGA \* Consumption estimated by calculating averages from both Steiner and Barth report projections. Production is at harvest values and includes hops lost to fire. \*\*Estimated accumulated surplus/deficit DOES NOT include alpha destroyed by fires to more accurately reflect potential real world surpluses. HGA subtracted the following numbers for the alpha adjustment: 1999: 220,000 pounds lost, 2000: 595,000 pounds lost.

**U.S. HOP EXPORTS – TOP 20 DESTINATIONS FOR U.S. HOPS**

SEPTEMBER 2002 – AUGUST 2003 (000's Pounds)						
COUNTRY		CONES	PELLETS	EXTRACT	TOTAL	PERCENT OF TOTAL
1	MEXICO	50,706	673,732	6,318,441	7,042,879	14.0%
2	CANADA	64,375	1,171,535	4,378,375	5,614,285	11.1%
3	BELGIUM- LUXEMBOURG	49,383	1,943,813	2,958,600	4,951,797	9.8%
4	GERMANY	8,378	499,126	3,779,601	4,287,104	8.5%
5	UNITED KINGDOM	481,709	385,147	2,535,313	3,402,170	6.8%
6	BRAZIL	59,745	2,167,141	746,043	2,972,930	5.9%
7	KOREA, REP. OF	0	249,122	2,413,618	2,662,740	5.3%
8	COLOMBIA	313,056	223,989	1,328,945	1,865,990	3.7%
9	NETHERLANDS	51,368	104,058	1,591,736	1,747,161	3.5%
10	HONG KONG	3,307	271,168	1,427,712	1,702,187	3.4%
11	THAILAND	0	326,725	1,373,037	1,699,762	3.4%
12	DOMINICAN REP.	0	16,314	1,462,104	1,478,418	2.9%
13	VENEZUELA	0	48,502	1,211,659	1,260,161	2.5%
14	JAPAN	677,039	335,984	78,484	1,091,507	2.2%
15	NIGERIA	0	0	775,144	775,144	1.5%
16	PHILIPPINES	0	28,660	718,706	747,366	1.5%
17	AUSTRALIA	48,502	22,928	652,568	723,997	1.4%
18	CHINA	0	51,147	613,766	664,913	1.3%
19	ECUADOR	38,360	22,708	388,013	449,081	0.9%
20	RUSSIA	0	232,146	172,842	404,989	0.8%
	Sub total	1,845,928	8,774,388	34,924,708	45,545,024	90.2%
	All Other Countries	136,907	773,821	4,045,037	4,955,765	9.8%
	<b>TOTAL EXPORTS</b>	<b>1,982,835</b>	<b>9,548,209</b>	<b>38,969,745</b>	<b>50,500,789</b>	<b>100%</b>

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics. Prepared by HGA

**U.S. HOP EXPORTS – REGIONAL ANALYSIS**

REGION	PERCENT OF TOTAL U.S. HOP EXPORTS			
	1999 - 2000	2000-2001	2001-2002	2002-2003
EUROPE	37%	33%	30%	32%
NORTH AMERICA	22%	22%	26%	25%
SOUTH AMERICA	18%	19%	19%	15.6%
ASIA	16%	17%	15%	18.4%
CARIBBEAN	4%	5%	4%	4%
ALL OTHERS	3%	4%	6%	4%

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics. Prepared by HGA

*U.S. HOP EXPORTS 98/99 – 02/03 (Pounds x 1,000)*

COUNTRY	'98-'99	'99-'00	'00-'01	'01-'02	'02-'03
Canada	3,256	3,762	5,914	5,809	5,614
Mexico	5,630	5,244	7,515	7,875	7,042
Costa Rica	27	21	181	176	131
El Salvador	163	7	35	154	130
Guatemala	109	75	57	152	160
Honduras	123	4	81	0	80
Nicaragua	0	49	12	-	11
Dominican Republic	1,300	1,332	2,357	1,324	1,478
Jamaica	52	161	160	115	74
Trinidad and Tobago	159	7	59	84	30
Argentina	631	768	677	475	363
Bolivia	214	122	38	0	176
Brazil	3,209	4,045	6,369	3,511	2,973
Chile	201	142	159	240	351
Colombia	613	799	1,975	1,739	1,866
Ecuador	108	376	313	233	448
Peru	439	394	159	115	195
Uruguay	43	40	8	4	23
Venezuela	783	466	1,306	2,462	1,260
Belgium	1,547	3,096	5,262	4,784	4,952
Denmark	189	104	249	2	0
Finland	75	247	70	3	189
France	288	485	550	83	100
Germany	3,669	4,734	6,273	4,387	4,287
Hungary	391	0	0	0	0
Ireland	939	438	1,054	511	349
Italy	103	178	289	254	284
Netherlands	851	1,631	2,405	1,401	1,747
Portugal	291	470	143	6	7
Russia	422	399	159	699	404
Spain	60	35	65	62	73
Switzerland	113	31	270	213	4
United Kingdom	3,413	2,496	3,277	2,980	3,402
Nigeria	321	40	1,310	1,252	775
South Africa	66	33	6	0	67
China	66	444	356	205	664
Hong Kong	487	1,357	1,924	1,534	1,702
Japan	1,509	1,289	1,778	1,790	1,092
Korea	126	948	1,850	2,129	2,663
Malaysia	173	236	206	138	243
Philippines	855	910	850	616	747
Singapore	75	166	107	150	120
Taiwan	0	0	1	7	0
Australia	803	706	1,409	1,630	724
Sri Lanka	66	4	31	0	4
Thailand	532	779	1,270	699	1,700
<b>SUB TOTAL</b>	<b>34,531</b>	<b>39,084</b>	<b>58,585</b>	<b>50,003</b>	<b>48,705</b>
<b>ALL OTHERS</b>	<b>1,432</b>	<b>1,746</b>	<b>2,894</b>	<b>1,773</b>	<b>1,796</b>
<b>TOTAL</b>	<b>35,963</b>	<b>40,830</b>	<b>61,479</b>	<b>51,776</b>	<b>50,501</b>

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics. Prepared by HGA  
Numbers may include minor rounding errors between standard/metric conversions.

## U.S. IMPORTS OF HOPS, PELLETS &amp; HOP EXTRACT (Pounds x 1,000)

CONES<sup>1</sup>

Mktg Yr	Aust	Belg	Canada	China	Czech	France	Gemany	NZ	Poland	U.K.	Other	Total
1993-94	265	0	628	0	1,931	1,082	6,228	300	602	28	5	11,069
1994-95	280	0	536	0	1,892	1,177	5,974	0	240	62	20	10,194
1995-96	328	0	234	0	278	1,345	7,665	209	237	152	68	10,516
1996-97	340	0	185	0	317	1,378	6,607	2	97	159	119	9,204
1997-98	7	0	203	0	170	1,283	4,652	2	2	112	0	6,431
1998-99	85	44	0	0	130	1,402	6,389	2	0	35	2	8,089
1999-00	2	0	2	0	663	1,774	5,760	31	0	205	11	8,450
2000-01	0	26.7	0	0	69.2	2,313	3,409	1.9	0	97.6	0	5,919
2001-02	0	0	0	-	110	2,159	4,349	4.4	0	136	0	6,810
2002-03	0	0	0	0	50	2,210	3,577	0.6	0	183	0	6,020

## PELLETS

Mktg Yr	Aust	Belg	Canada	China	Czech	France	Gemany	NZ	Poland	U.K.	Other	Total
1993-94	0	0	0	0	53	0	1,634	150	0	201	0	2,038
1994-95	4	0	0	42	9	47	1,605	410	0	357	2	2,476
1995-96	0	0	0	42	15	0	1,642	294	0	450	0	2,443
1996-97	0	0	0	0	90	0	2,438	560	0	441	31	3,560
1997-98	181	0	0	0	99	0	2,892	514	0	410	99	4,195
1998-99	202	0	0	0	44	0	1,426	304	0	223	23	2,222
1999-00	220	0	0	0	2	0	1,675	580	20	106	0	2,603
2000-01	1,006	0	0	0	12.3	0	1,296	601	0	163	0	3,090
2001-02	562	0	0	0	69	0	1,402	38	0	240	0	2,316
2002-03	912	0	0	915	43	0	1,923	205	0	166	520*	4,732

## TOTAL EXTRACT - HOP EQUIVALENT X 4

Mktg Yr	Aust	Belg	Canada	China	Czech	France	Gemany	NZ	Poland	U.K.	Other	Total
1993-94	0	0	0	0	0	0	26	0	0	53	0	79
1994-95	0	0	0	0	0	0	0	0	0	97	0	97
1995-96	0	0	0	0	0	0	133	0	0	17	18	168
1996-97	35	0	0	0	0	0	71	0	0	35	0	141
1997-98	0	0	0	0	0	0	335	0	0	9	0	344
1998-99	0	0	0	0	0	0	6	0	0	105	0	111
1999-00	0	0	0	0	0	0	7	27	0	526	0	560
2000-01	0	7	0	0	0	10	125	18	0	35	1	197
2001-02	0	7	0	0	0	10.6	125	17.6	0	15.8	0.8	177
2002-03	95	322	0	0	0	3.5	271.6	0	0.9	0	0	693

## TOTAL

Mktg Yr	Aust	Belg	Canada	China	Czech	France	Gemany	NZ	Poland	U.K.	Other	Total
1993-94	265	0	628	0	1,984	1,082	7,888	450	602	282	5	13,186
1994-95	284	0	536	42	1,901	1,224	7,579	410	240	516	22	12,767
1995-96	328	0	234	42	293	1,345	9,440	503	237	619	86	13,127
1996-97	375	0	185	0	408	1,378	9,116	562	97	635	150	12,906
1997-98	187	0	203	0	269	1,283	7,879	516	2	531	99	10,970
1998-99	287	44	0	0	174	1,402	7,821	306	0	363	25	10,422
1999-00	222	0	2	0	665	1,774	7,442	638	20	837	11	11,614
2000-01	1007	34	0	0	82	2,324	4,831	621	0	296	1	9,205
2001-02	562.4	7	0	0	179	2,170	5,876	60	0	392	0.8	9,304
2002-03	95	322	0	915	93	2,213	5,772	206	0.9	345	1,451	11,445

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics. Prepared by HGA  
Numbers may include minor rounding errors between standard/metric conversions.

\* This represents 519,632 pounds from Spain that were extracted in the United States and then sent back to Europe.

**WORLD BEER PRODUCTION 1993, 1998-2003 (MILLION HL)**

	1993	1998	1999	2000	2001	2002	2003*
Germany	116.0	108.3	112.8	110.4	108.5	109.0	105.0
Great Britain	54.9	55.7	57.9	55.3	56.8	56.8	56.8
Russia	24.5	38.9	45.9	60.5	65.0	70.0	79.8
Spain	24.3	24.7	25.9	26.5	27.7	28.0	28.0
Netherlands	20.4	24.5	24.5	25.1	25.2	25.3	25.1
France	18.3	19.4	19.8	18.9	18.9	18.9	18.2
Poland	12.7	22	22.5	23.5	24.1	24.2	25.0
Czech Republic	17.8	18.4	17.9	18.0	17.9	17.5	17.5
Belgium	14.2	14.2	14.2	14.7	15.0	15.1	15.9
Italy	11.7	12.5	12.1	12.6	12.6	12.4	12.7
Austria	9.8	8.4	8.9	8.8	8.6	8.8	9.0
Denmark	8.4	7.5	8	7.5	7.2	7.2	7.9
USA	237.3	238	236.5	233.0	231.0	231.5	235.0
Brazil	57.0	89.2	88.6	90.0	83.0	85.0	86.0
Mexico	43.8	56.9	57.3	60.3	63.5	65.0	66.0
Canada	22.9	22.81	22.9	23.0	23.2	23.2	22.5
Colombia	19.5	18.4	16.5	16.5	16.0	16.0	16.0
Venezuela	15.5	18.1	17.1	15.5	15.8	16.5	16.8
Argentina	10.3	12	13	12.6	12.3	12.4	13.5
China	122.5	180.0	180.0	210.0	225.0	231.2	245.0
Japan	69.0	71.5	71.5	71.0	71.2	70.5	64.0
South Korea	15.3	13.8	13.8	18.6	18.6	19.0	19.0
Philippines	13.5	12.5	12.4	12.2	12.0	12.0	12.1
South Africa	22.5	25.7	25.7	24.5	24.5	24.0	24.5
Australia	18.1	17.8	17.6	17.2	17.2	17.2	17.5
Nigeria	6.7	1.1	1.1	6.0	6.7	6.8	6.8
New Zealand	3.6	4.2	3.2	3.0	3.0	3.1	3.1
All Other Countries	178.1	187.5	197.0	200.2	226.6	229.4	219.7
<b>WORLD TOTALS:</b>	<b>1,188.6</b>	<b>1,324</b>	<b>1,344.6</b>	<b>1,395.4</b>	<b>1,420.7</b>	<b>1,439.3</b>	<b>1468.4</b>

SOURCE: Barth &amp; Steiner Reports. Prepared by HGA

\*estimate

**WORLD'S 40 LARGEST BREWERS (2002 RANKING)**

	BREWERY NAME	LOCATION	2001 MIL. HL.	2002 MIL. HL.	% of Total World 02	Cumulative Percentage
1	Anheuser-Busch	U.S.A.	123.0	129.0	8.93%	8.93%
2	SAB-Miller U.S.		47.0	46.5	3.22%	12.15%
3	SAB-Miller China		19.3	23.7	1.64%	N/A
4	SAB-Miller Other World		64.0	49.8	3.45%	N/A
5	SAB-Miller Total		130.3	120.0	8.31%	20.46%
6	Interbrew (Interbrew/ Whitbread/Bass)		87.0	91.2	6.31%	26.78%
7	Heineken	Netherlands	80.9	84.8	5.87%	32.65%
8	AMBEV	Brazil	64.0	58.0	4.02%	36.67%
9	Carlsberg (Carlsberg /Pripps /Hartwall /Baltica)		64.0	78.6	5.44%	42.11%
10	Modelo	Mexico	38.4	39.9	2.76%	44.87%
11	Scottish Courage	U.K.	31.0	31.8	2.20%	47.07%
12	Asahi	Japan	27.6	26.6	1.84%	48.92%
13	Coors	U.S.A.	27.0	26.6	1.84%	50.76%
14	Molson Group Canada	Canada	15.0	11.3	0.78%	N/A
15	Molson Group Brazil	Brazil	11.3	11.5	0.80%	N/A
16	Molson Group Total		26.3	22.8	1.58%	52.34%
17	Kirin	Japan	25.5	25.1	1.74%	54.07%
18	Tsingtao	China	25.1	29.9	2.07%	56.14%
19	Femsa (Cuauhtemoc)	Mexico	23.9	23.8	1.65%	57.79%
20	Jilin	China	19.3	23	1.59%	59.39%
21	Yan Ying Brewery	China	17.0	20.9	1.45%	60.83%
22	Polar Group	Venezuela	15.4	12.0	0.83%	61.66%
23	Diageo / Guinness	U.K. / Ireland	15.0	15.5	1.07%	62.74%
24	Santo Domingo (Bavaria)	Colombia	14.0	14.5	1.00%	63.74%
25	Brau Union	Austria	12.8	13.0	0.90%	64.64%
26	San Miguel	Philippines	12.5	11.5	0.80%	65.44%
27	Hite (formerly Chosun)	Korea	12.0	10.1	0.70%	66.14%
28	Schincariol	Brazil	12.0	13.0	0.90%	67.04%
29	Foster's Brewing Group	Australia	11.5	12.9	0.89%	67.93%
30	Sapporo	Japan	10.7	9.7	0.67%	68.60%
31	Ha-er-bin brewery group	China	5.5	10.4	0.72%	69.32%
32	Quilmes Group	Argentina	10.0	8.0	0.55%	69.87%
33	Holsten Group + König	Germany	9.9	9.6	0.66%	70.54%
34	Lion Nathan	New Zealand	9.9	9.9	0.69%	71.22%
35	Radeberger Group	Germany	8.9	7.9	0.55%	71.77%
36	Carlsberg - Chang	Thailand	8.2	12.6	0.87%	72.64%
37	BGI/Castel Group	France	8.0	10.2	0.71%	73.35%
38	Mahou - San Migual	Spain		9.1	0.63%	73.98%
39	Zhujiang (Interbrew)	China	7.4	7.9	0.55%	74.53%
40	Chong Qing Brewery	China	5.3	7.5	0.52%	75.04%

SOURCE: Merchant contacts &amp; reports



*THANK YOU*

Hop Growers of America would like to thank the many companies and government agency employees that provided the information presented in the 2003 statistical report. Without your assistance, this publication would not be possible.

Conversions used while compiling  
the data presented in this document:

1 hectare = 2.4711 acres  
1 acre = 0.405 hectares  
1 kilogram = 2.2046 pounds  
1 pound = 0.45 kilograms  
1 metric tonne = 2204.6 pounds  
1 hectoliter = 21.997 gallons  
1 zentner = 110.23 pounds