

Blueberries

NORTH AMERICAN BLUEBERRY COUNCIL

STATISTICAL RECORD

2018 CROP YEAR

Blueberry Production & Utilization



AUGUST 2019

PREPARED BY

THE NORTH AMERICAN BLUEBERRY COUNCIL

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To: NABC Members
From: Rick Ruckman
Date: August 28, 2019
Re: **2018 NABC Blueberry Statistical Record**

The NABC Blueberry Statistical Record for 2018 is enclosed providing the most recent blueberry production and utilization data as well as an overview of historic statistical figures illustrating how the North American blueberry industry has progressed over the years. Some of the highlights from the data contained in the 2018 statistical report follow:

- North American blueberry production totaled 1,016,000,000 pounds in 2018, up 2% (19,940,000 pounds) from the crop of 996,060,000 pounds produced in 2017 (see page #3). Highbush blueberries represented 77.2% of total production in 2018 (784,100,000 pounds) and lowbush blueberries accounted for 22.8% of the total (231,900,000 pounds).
- Figures for 2018 show that 44.8% of the total North American blueberry crop was sold as fresh blueberries (455,600,000 pounds) and the remaining 55.2% sold as process berries (560,400,000 pounds). Highbush blueberries accounted for 99.1% of fresh blueberry movement in 2018 (451,400,000 pounds) and 59.4% of total process blueberries (332,700,000 pounds). Mexico (74,000,000) was the top fresh highbush blueberry supplier in 2018 followed by British Columbia (70,000,000 pounds), Oregon (59,800,000 pounds), California (52,200,000), Washington (40,000,000), Michigan (36,500,000), and both Georgia and New Jersey (both at 30,000,000 pounds). Washington was the leading supplier of process highbush blueberries in 2018 at 90,000,000 pounds followed by British Columbia at 85,000,000 pounds, Oregon at 74,200,000 pounds, Michigan at 33,000,000 pounds and Georgia at 20,000,000 pounds (see page #1). The total North American blueberry crop in 2018 came in at 1,016,000,000 pounds, considerably above the most recent five-year average (2010 to 2014) of 845,324,000 pounds (see page #6). However, the past four years (2015-2018) have averaged a bit higher at 1,069,630,000.
- Fresh market sales of blueberries in 2018 had an estimated farm gate value of \$709,481,000 which is 7.03% less than the level attained in 2017 (\$763,168,360). Blueberries for processing had an estimated farm gate value of \$286,770,700 in 2018, up 18.04% from the value of \$242,941,900 attained in 2017 (see pages #9 and #11). The 2018 crop of 1,016,000,000 pounds had an estimated total farm gate value of \$996,251,700 which is \$9,858,560 less than the total estimated farm gate value of the 2017 crop which totaled \$1,006,110,260 (see page #17).

- Offshore exports of North American blueberries in 2018 totaled 163,178,247 pounds, which is up 10,566,247 pounds from the total exported offshore in 2017 (152,612,000 pounds) (see page # 28). Offshore exports account for an average of 13% of annual production over the past ten seasons (see page #28). The top five offshore export markets for North American fresh blueberries (U.S. and Canada combined) in 2018 were Belgium (2,481,202), South Korea (1,379,509 pounds), Japan (840,991 pounds), Mexico (755,501) and Singapore (725,186 pounds). The top five offshore export markets for North American frozen blueberries (U.S. and Canada combined) in 2018 were Germany (33,017,198 pounds), Japan (27,812,484 pounds), Poland (13,588,789 pounds), China (11,174,536 pounds) and the Netherlands (10,715,300 pounds) (see pages #18 and #19).
- North American consumption totaled an estimated 1,243,256,000 pounds in 2018, up 44,929 pounds from the 1,198,327,000-pound total of the previous season (see Page #30). The industry decreased June 30th carry out frozen inventory from 133,200,000 pounds as of June 30, 2018 to 124,600,000 pounds on June 30, 2019, representing a decrease in inventory of 8,600,000 pounds (see page #29).
- North American domestic per capita consumption totaled an estimated 54.5 ounces per person in 2018, up 1.5 ounces over the total of 53.0 ounces in 2017. Estimated fresh consumption of 40.5 ounces per person in 2018 represents 74.3% of total consumption. Process consumption estimated at 14.0 ounces per person in 2018 represents the remaining 25.7% of total consumption, (see page #32).

If you have any questions concerning this report, or wish to obtain additional copies, please notify the NABC office at (916) 983-2279.

BLUEBERRY STATISTICAL RECORD
2018
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2018
NORTH AMERICAN BLUEBERRY PRODUCTION
(Millions of Pounds)

<u>Highbush</u>	<u>Fresh</u>	<u>Process</u>	<u>Total</u>
<i>Western Region</i>			
British Columbia	70.0	85.0	155.0
California	52.2	11.2	63.4
Oregon	59.8	74.2	134.0
Washington	40.0	90.0	130.0
Mexico	74.0	2.0	76.0
Sub-Total	296.0	262.4	558.4
<i>Midwest Region</i>			
Illinois*	1.0	0.0	1.0
Indiana	1.0	0.3	1.3
Michigan	36.5	33.0	69.5
Others 1/	0.5	0.0	0.5
Sub-Total	39.0	33.3	72.3
<i>Northeast Region</i>			
New Jersey	30.0	8.0	38.0
New York	1.0	0.0	1.0
Ontario	2.0	0.0	2.0
Others 2/	0.5	0.0	0.5
Sub-Total	33.5	8.0	41.5
<i>Southern Region</i>			
Alabama*	0.2	0.0	0.2
Arkansas*	0.1	0.0	0.1
Florida	19.8	0.0	19.8
Georgia	30.0	20.0	50.0
Louisiana	0.5	0.0	0.5
Mississippi	4.0	1.0	5.0
North Carolina	25.0	8.0	33.0
Texas	2.1	0.0	2.1
Others 3/	1.2	0.0	1.2
Sub-Total	82.9	29.0	111.9
HIGHBUSH TOTAL:	451.4	332.7	784.1
<u>Lowbush:</u>	<u>Fresh</u>	<u>Process</u>	<u>Total</u>
Maine	0.7	49.3	50.0
New Brunswick	0.0	53.5	53.5
Newfoundland	0.0	0.0	0.0
Nova Scotia	1.0	21.0	22.0
Prince Edward Island	0.0	18.7	18.7
Quebec	2.5	85.2	87.7
LOWBUSH TOTAL:	4.2	227.7	231.9
GRAND TOTAL:	455.6	560.4	1,016.0

Others:

1/ Kentucky, Minnesota, Missouri, Ohio, Wisconsin

2/ Connecticut, Maine, Maryland, Massachusetts, New Hampshire, Pennsylvania, Rhode Island, Vermont, West Virginia

3/ Oklahoma, South Carolina, Tennessee

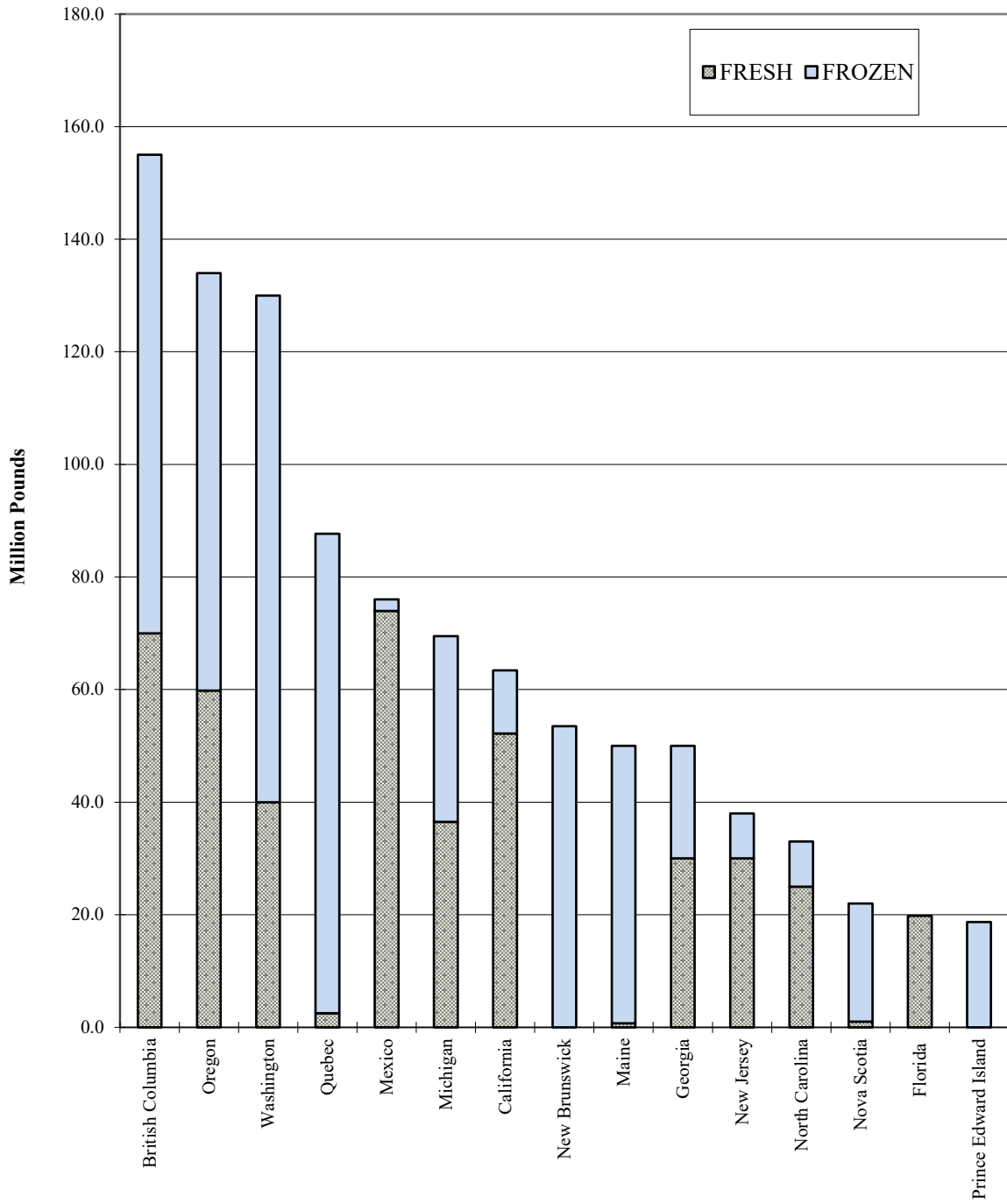
SOURCE:

HIGHBUSH - US, BC, Mexico and Ontario (except Alabama/Arkansas/Illinois/New York) = NABC Area Reps 03/19

LOWBUSH - Maine = NABC Area Reps 3/19

*** data from USHBC Collections**

**2018
TOP 15 NORTH AMERICAN BLUEBERRY PRODUCTION REGIONS**



NORTH AMERICAN ANNUAL BLUEBERRY PRODUCTION
2014-2018
(000 Pounds)

HIGHBUSH		2014	2015	2016	2017 [^]	2018
REGION:						
WESTERN	BRITISH COLUMBIA	144,336	180,790	164,000	135,606	155,000
REGION	CALIFORNIA	55,200	63,900	60,500	63,030	63,400
	OREGON	88,400	96,900	117,000	110,780	134,000
	WASHINGTON	95,800	103,950	120,000	117,380	130,000
	MEXICO	23,300	27,000	37,700	54,000	76,000
	<u>SUB TOTAL</u>	<u>407,036</u>	<u>472,540</u>	<u>499,200</u>	<u>480,796</u>	<u>558,400</u>
MIDWEST	ILLINOIS	1,900	1,400	1,600	1,600	1,000
REGION	INDIANA	2,000	1,600	1,600	1,300	1,300
	MICHIGAN	99,000	73,100	110,300	102,000	69,500
	*OTHERS 1/	400	400	1,000	700	500
	<u>SUB TOTAL</u>	<u>103,300</u>	<u>76,500</u>	<u>114,500</u>	<u>105,600</u>	<u>72,300</u>
NORTHEAST	NEW JERSEY	55,000	53,400	44,120	44,300	38,000
REGION	NEW YORK	1,500	1,720	1,390	1,000	1,000
	ONTARIO	2,152	1,588	2,000	2,000	2,000
	*OTHERS 2/	400	400	100	200	500
	<u>SUB TOTAL</u>	<u>59,052</u>	<u>57,108</u>	<u>47,610</u>	<u>47,500</u>	<u>41,500</u>
SOUTHERN	ALABAMA	520	500	300	200	200
REGION	ARKANSAS	490	520	100	100	100
	FLORIDA	19,000	24,800	14,700	20,070	19,800
	GEORGIA	92,000	85,000	70,800	32,910	50,000
	LOUISIANA	1,000	1,000	1,000	500	500
	MISSISSIPPI	7,300	5,800	8,200	3,870	5,000
	NORTH CAROLINA	48,800	49,500	46,600	25,700	33,000
	TEXAS	1,000	1,000	300	1,500	2,100
	*OTHERS 3/	900	900	1,300	1,000	1,200
	<u>SUB TOTAL</u>	<u>171,010</u>	<u>169,020</u>	<u>143,300</u>	<u>85,850</u>	<u>111,900</u>
	HIGHBUSH TOTAL	<u>740,398</u>	<u>775,168</u>	<u>804,610</u>	<u>719,746</u>	<u>784,100</u>
LOWBUSH	MAINE	103,800	100,500	101,640	67,650	50,000
	NEWFOUNDLAND	1,000	0	0	230	0
	NEW BRUNSWICK	58,900	82,390	82,356	53,278	53,500
	NOVA SCOTIA	63,474	66,810	34,318	50,956	22,000
	PRINCE EDWARD ISLAND	22,090	17,543	26,972	23,498	18,700
	QUEBEC	73,218	52,254	121,900	80,702	87,700
	<u>LOWBUSH TOTAL</u>	<u>322,482</u>	<u>319,497</u>	<u>367,186</u>	<u>276,314</u>	<u>231,900</u>
	<u>GRAND TOTAL</u>	<u>1,062,880</u>	<u>1,094,665</u>	<u>1,171,796</u>	<u>996,060</u>	<u>1,016,000</u>

Highbush blueberry production in 2018 is **7%** greater than the total for 2017.

Lowbush blueberry production in 2018 is **-16.1%** lower than the total for 2017.

Total blueberry production in 2018 is **0.6%** greater than the total for 2017.

The 5 year average of total production from 2014 to 2018 is **1,065,480** pounds.

*Includes: 1/=Kentucky, Minnesota, Missouri, Ohio, Wisconsin, 2/=Connecticut, Delaware, Massachusetts, Maine, Maryland, New Hampshire, Pennsylvania, Rhode Island, Vermont, West Virginia, 3/=Oklahoma, South Carolina, Tennessee.

Source: 2018 see page #1

[^] 2016 Numbers revised per USDA/NASS June 2019 and Stats Canada

2014 to 2017 Highbush = USDA/NASS; 2017 NABC Estimates; Statistics Canada; NABC for Illinois, Louisiana, Texas

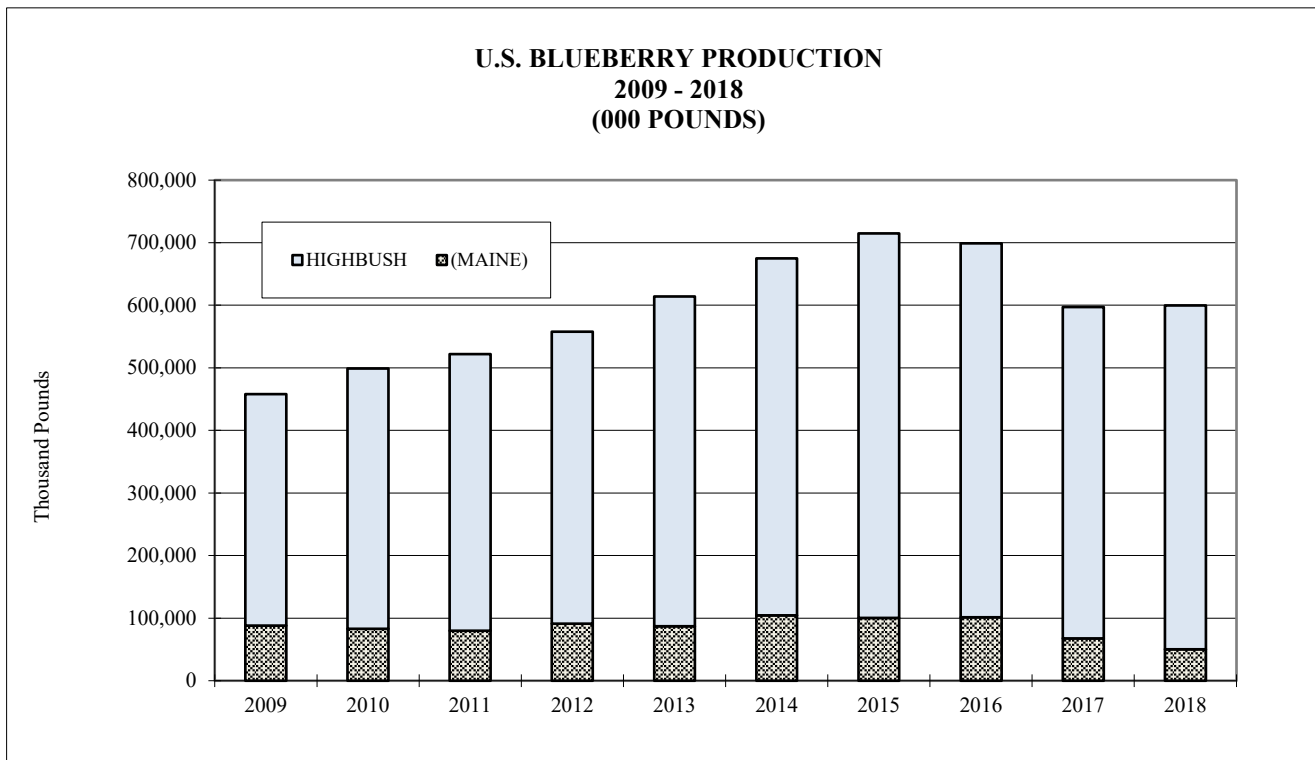
2014 to 2017 Lowbush Canadian=Statistics Canada

2014 to 2017 Lowbush Maine = USDA/NASS

**UNITED STATES BLUEBERRY PRODUCTION
2009 -2018
(000 Pounds)**

YEAR	<u>MICHIGAN/ INDIANA</u>	<u>NEW JERSEY</u>	<u>MAINE</u>	<u>NORTH CAROLINA</u>	<u>WASHINGTON/ OREGON/ CALIFORNIA</u>	<u>SOUTHERN STATES & OTHERS</u> *	<u>TOTAL</u>
2009	102,700	53,000	88,100	32,700	111,200	70,400	458,100
2010	112,600	49,000	83,000	39,050	124,600	90,680	498,930
2011	73,600	62,000	79,900	36,200	168,600	101,700	522,000
2012	88,500	51,500	91,100	40,000	182,900	103,900	557,900
2013	117,200	47,940	87,130	40,000	222,500	99,050	613,820
2014	101,000	55,000	104,400	48,800	239,400	126,410	675,010
2015	74,700	53,400	100,500	49,500	264,750	171,940	714,790
2016	111,900	44,120	101,840	46,600	297,500	96,990	698,950
^ 2017	103,300	44,300	67,650	25,700	291,190	64,780	596,920
2018	70,800	38,000	50,000	33,000	327,400	80,770	599,970
TEN YEAR AVERAGE 2009-2018							
	95,630	49,826	85,362	39,155	223,004	100,662	578,526
MOST RECENT THREE YEAR AVERAGE 2016-2018							
	95,333	42,140	73,163	35,100	305,363	80,847	631,947

* Also includes: Georgia, Arkansas, Florida, Alabama, Mississippi, Louisiana, New York, Connecticut, Delaware, Illinois, Kentucky, Massachusetts, Maryland, Minnesota, Missouri, New Hampshire, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Wisconsin, West Virginia



^ Numbers revised per USDA/NASS

Source: Page #3.

**CANADIAN BLUEBERRY PRODUCTION
2009 - 2018
(000 Pounds)**

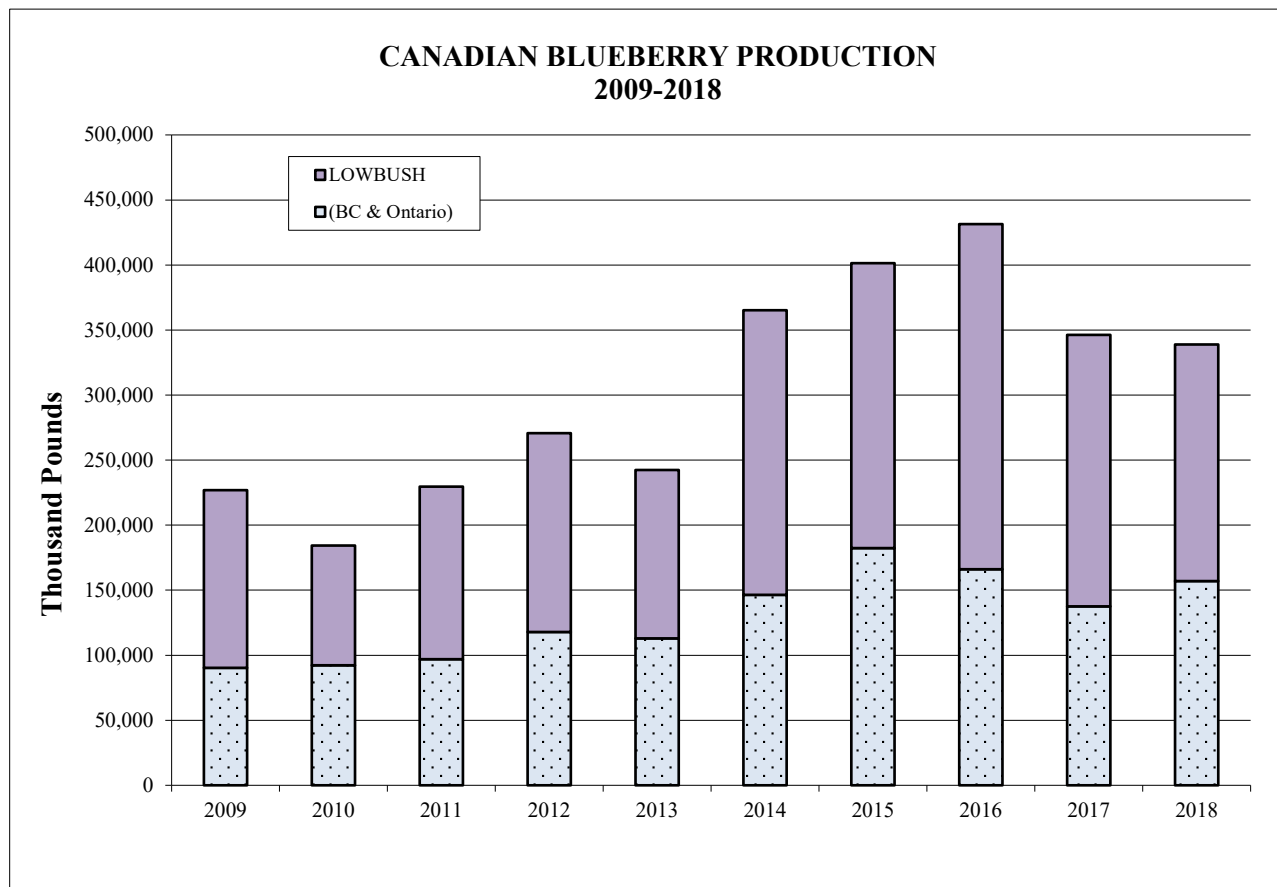
<u>YEAR</u>	<u>NEW- FOUNDLAND</u>	<u>P.E.I.</u>	<u>NOVA SCOTIA</u>	<u>NEW BRUNS.</u>	<u>QUEBEC</u>	<u>ONTARIO</u>	<u>B.C.</u>	<u>TOTAL</u>
2009	500	10,428	33,006	23,474	69,192	1,976	88,350	226,926
2010	224	12,428	32,790	32,580	13,898	2,280	90,000	184,200
2011	214	13,338	29,424	27,582	62,058	1,914	95,000	229,530
2012	1,000	11,400	40,000	45,000	55,600	1,900	115,900	270,800
2013	-	13,300	41,400	42,610	32,200	2,000	110,842	242,352
2014	1,000	22,090	63,474	58,890	73,218	2,200	144,336	365,208
2015	-	17,453	66,810	82,390	52,254	1,588	180,790	401,285
2016	-	26,972	34,318	82,356	121,900	2,000	164,000	431,546
* 2017	230	23,498	50,956	53,278	80,702	2,000	135,606	346,270
2018	-	18,700	22,000	53,500	87,700	2,000	155,000	338,900

TEN YEAR AVERAGE 2009-2018

317	16,961	41,418	50,166	64,872	1,986	127,982	303,702
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MOST RECENT THREE YEAR AVERAGE 2016-2018

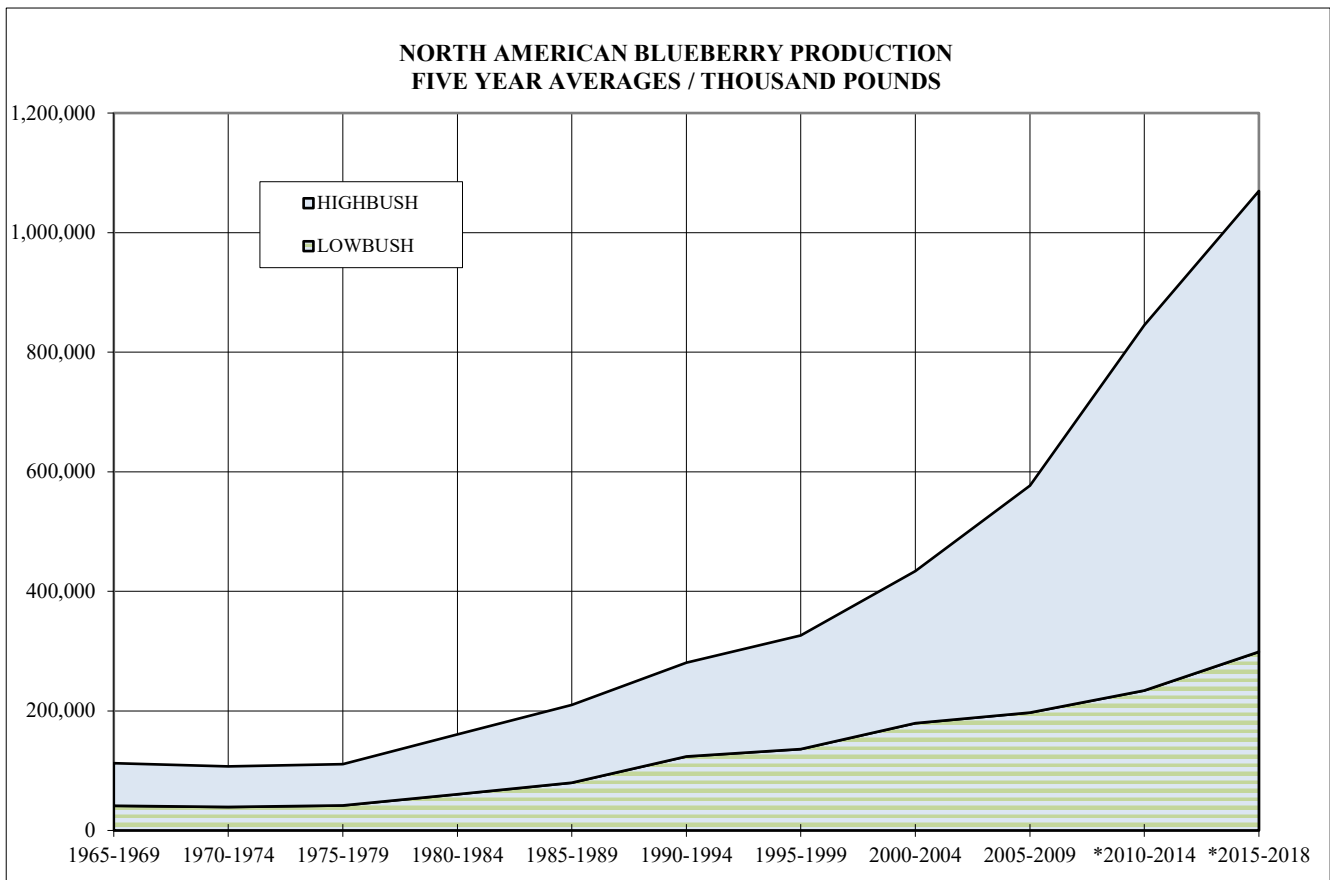
77	23,057	35,758	63,045	96,767	2,000	151,535	372,239
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* Numbers revised per Stats Canada; NABC Area Reps 3/2019

**NORTH AMERICAN BLUEBERRY PRODUCTION
5 YEAR AVERAGES (1965-2018)
(000 Pounds)**

<u>YEARS</u>	<u>LOWBUSH</u>	<u>HIGHBUSH</u>	<u>TOTAL</u>
1965-1969	41,299	71,169	112,468
1970-1974	39,309	68,091	107,400
1975-1979	41,815	68,981	110,796
1980-1984	60,816	100,059	160,875
1985-1989	80,037	130,083	210,120
1990-1994	123,606	157,003	280,609
1995-1999	136,149	190,090	326,239
2000-2004	179,291	254,739	434,030
2005-2009	197,288	379,677	576,965
*2010-2014	234,132	611,192	845,324
*2015-2018	298,724	770,906	1,069,630



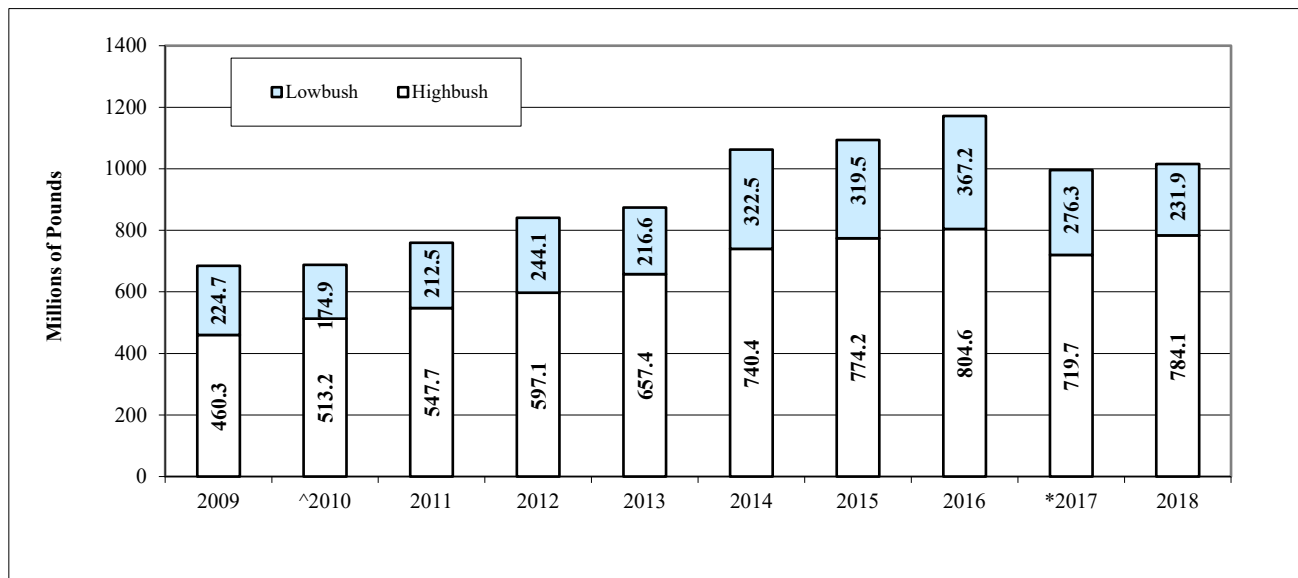
From 1965 to 2014 Average Total Production has increased more than seven fold. Nearly 10 fold including 4 year average of most recent years through 2018. The five year production average for 2010 to 2014 is +47% above the previous five year average (2005 to 2009)

*2010 includes data from Mexico

- Note that 2015-2018 is a four year average only

NORTH AMERICAN BLUEBERRY PRODUCTION 2009-2018 (Millions of Pounds)

	<u>Highbush</u>	<u>Lowbush</u>	<u>Total</u>
2009	460.3	224.7	685.0
^2010	513.2	174.9	688.1
2011	547.7	212.5	760.2
2012	597.1	244.1	841.2
2013	657.4	216.6	874.0
2014	740.4	322.5	1062.9
2015	774.2	319.5	1093.7
2016	804.6	367.2	1171.8
*2017	719.7	276.3	996.0
2018	784.1	231.9	1016



Production Percentages Over Last 5 Years

2014 Highbush total production 740,398,000 pounds = 69.7%
 Lowbush total production 322,482,000 pounds = 30.3%

2015 Highbush total production 774,168,000 pounds = 70.8%
 Lowbush total production 319,497,000 pounds = 29.2%

2016 Highbush total production 804,610,000 pounds = 68.7%
 Lowbush total production 367,186,000 pounds = 31.3%

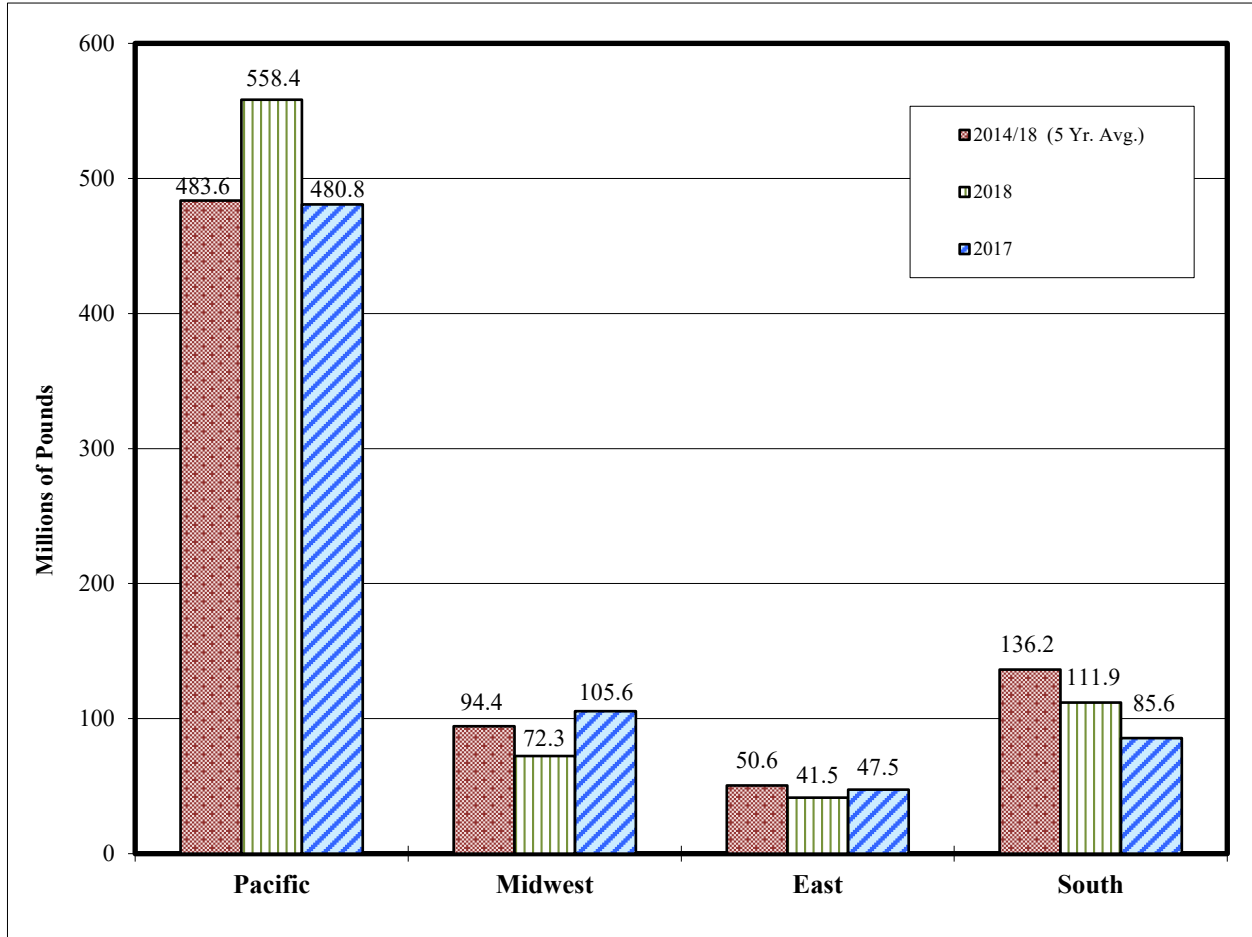
2017 Highbush total production 719,746,000 pounds = 72.3%
 Lowbush total production 276,314,000 pounds = 27.7%

2018 Highbush total production 770,100,000 pounds = 77.2%
 Lowbush total production 231,900,000 pounds = 22.8%

^ Started including Mexico data

* Numbers revised per USDA/NASS and Stats Canada - June 2019

Highbush Blueberry Production by Region (Millions of Pounds)



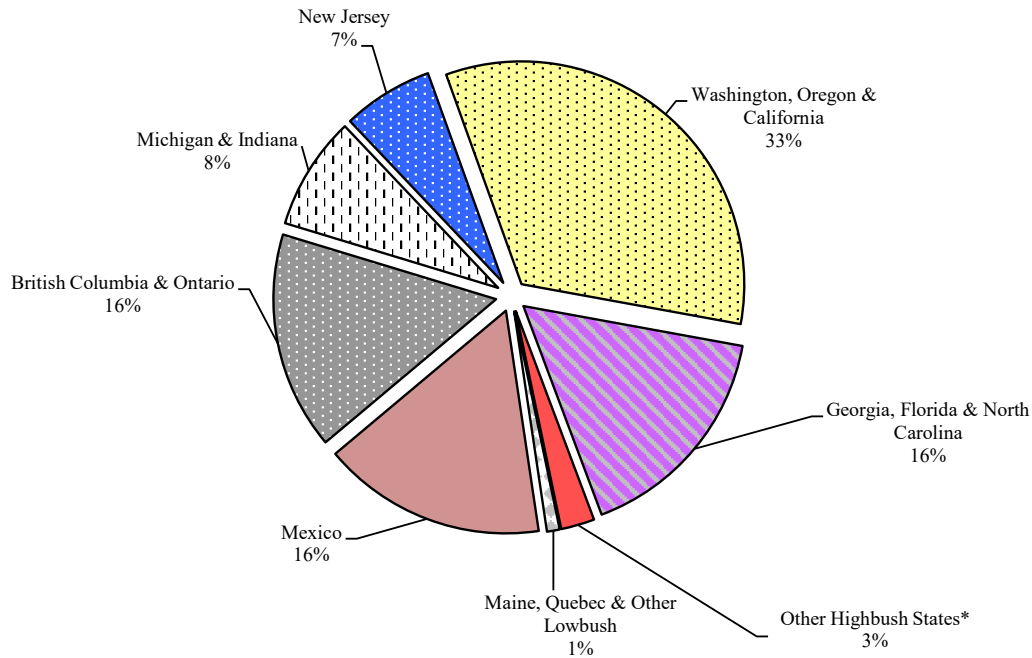
Pacific = Oregon, Washington, British Columbia, California, Mexico

Midwest = Illinois, Indiana, Michigan, Kentucky Minnesota, Missouri, Ohio, Wisconsin

East = New Jersey, New York, Ontario, Connecticut, Maine, Maryland, Massachusetts, Delaware
New Hampshire, Pennsylvania, Rhode Island, Vermont, West Virginia

South = North Carolina, Georgia, Florida, Arkansas, Alabama, Mississippi, Louisiana,
Texas, Oklahoma, South Carolina, Tennessee

**2018
NORTH AMERICAN SOURCE OF FRESH BLUEBERRIES**



TOTAL BLUEBERRIES MARKETED FRESH IN 2018

455,600,000 Pounds

FRESH MARKET BLUEBERRY SALES TOTALED AN ESTIMATED FARM GATE VALUE OF:

\$709,481,000

Fresh market consumption equals 44.8% of North American total production.

Fresh market income equals 71.2% of North American total income.

Highbush fresh market sales equal 57.6% of highbush production.

2018 total fresh pounds increased by 4.30% compared to 2017 (455.6 million pounds versus 436.8 million pounds).

2018 fresh sales dollars decreased by 7.0% compared to 2017 level (\$709.5 million versus \$763.2 million).

***Other Highbush States = Alabama, Arkansas, Connecticut, Illinois, Kentucky, Louisiana, Maryland, Massachusetts, Maine, Minnesota, Mississippi, Missouri, New York, New Hampshire, Oklahoma, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, West Virginia, Wisconsin**

Sources: Value of production: USDA/NASS "Non-citrus Fruits & Nuts Summary" and Area Reps, July 2019
Stats Canada "Fruit & Vegetable Production" Table 001-0009 April 2019

Note: 2017 data revised per USDA/NASS "Non-citrus Fruits & Nuts Summary" - June 2019 and Stats Canada - July 2019

**NORTH AMERICAN FRESH BLUEBERRY PRODUCTION
2009-2018
(000 Pounds)**

<u>YEAR</u>	<u>NEW JERSEY</u>	<u>MICHIGAN/ INDIANA</u>	<u>NORTH CAROLINA</u>	<u>GEORGIA/ FLORIDA</u>	<u>WASHINGTON/ OREGON/ CALIFORNIA</u>	<u>SOUTHERN STATES & OTHERS**</u>	<u>CANADA</u>	<u>TOTAL</u>
2009	45,000	51,700	25,500	36,500	58,700	7,650	57,877	282,927
2010	42,000	51,000	27,350	52,400	67,500	6,180	53,211	299,641
2011	47,000	35,300	28,600	60,400	109,300	6,700	43,795	331,095
2012	43,000	34,000	30,000	54,100	113,400	11,800	54,115	340,415
2013	43,500	50,200	32,000	54,500	106,600	11,800	54,576	353,176
2014	49,750	48,600	37,600	71,000	107,700	36,200	62,363	413,213
2015	45,800	42,000	37,500	70,500	86,000	37,840	70,998	390,638
2016	37,400	55,000	34,800	58,000	118,100	48,000	63,495	414,795
2017	36,000	50,000	21,100	44,800	141,300	114,000	79,820	487,020
2018	30,000	37,500	25,000	49,800	152,000	166,400	119,898	580,598

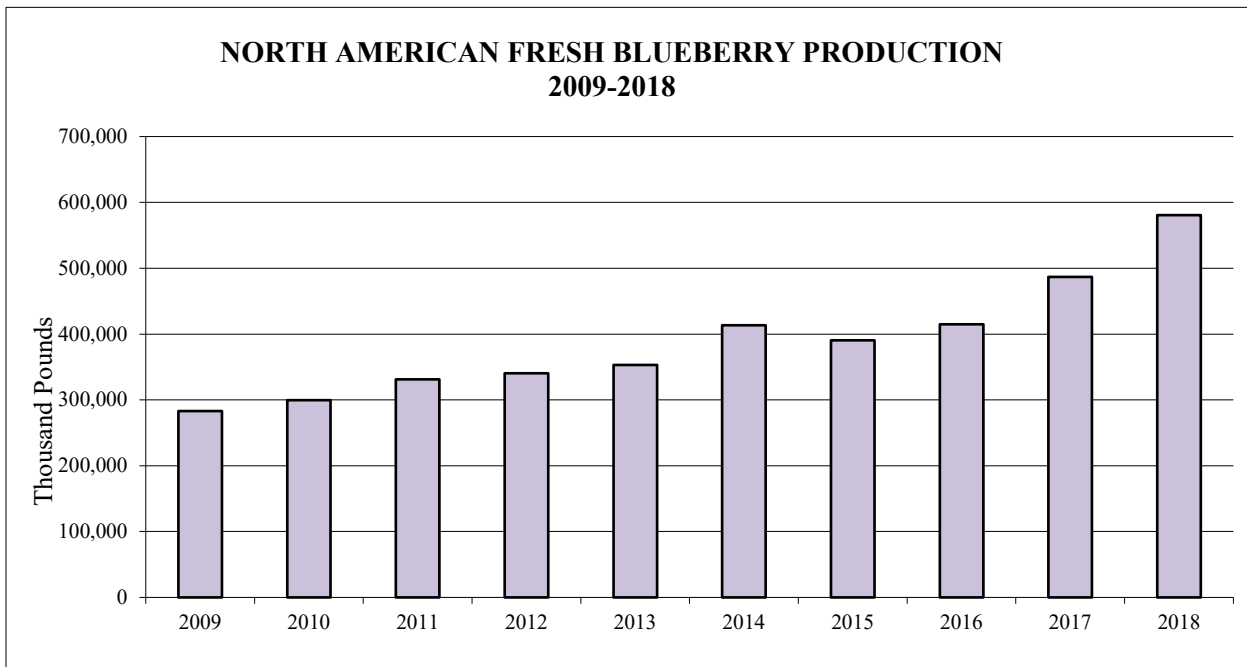
TEN YEAR AVERAGE 2009-2018

41,945	45,530	29,945	55,200	106,060	44,657	66,015	389,352
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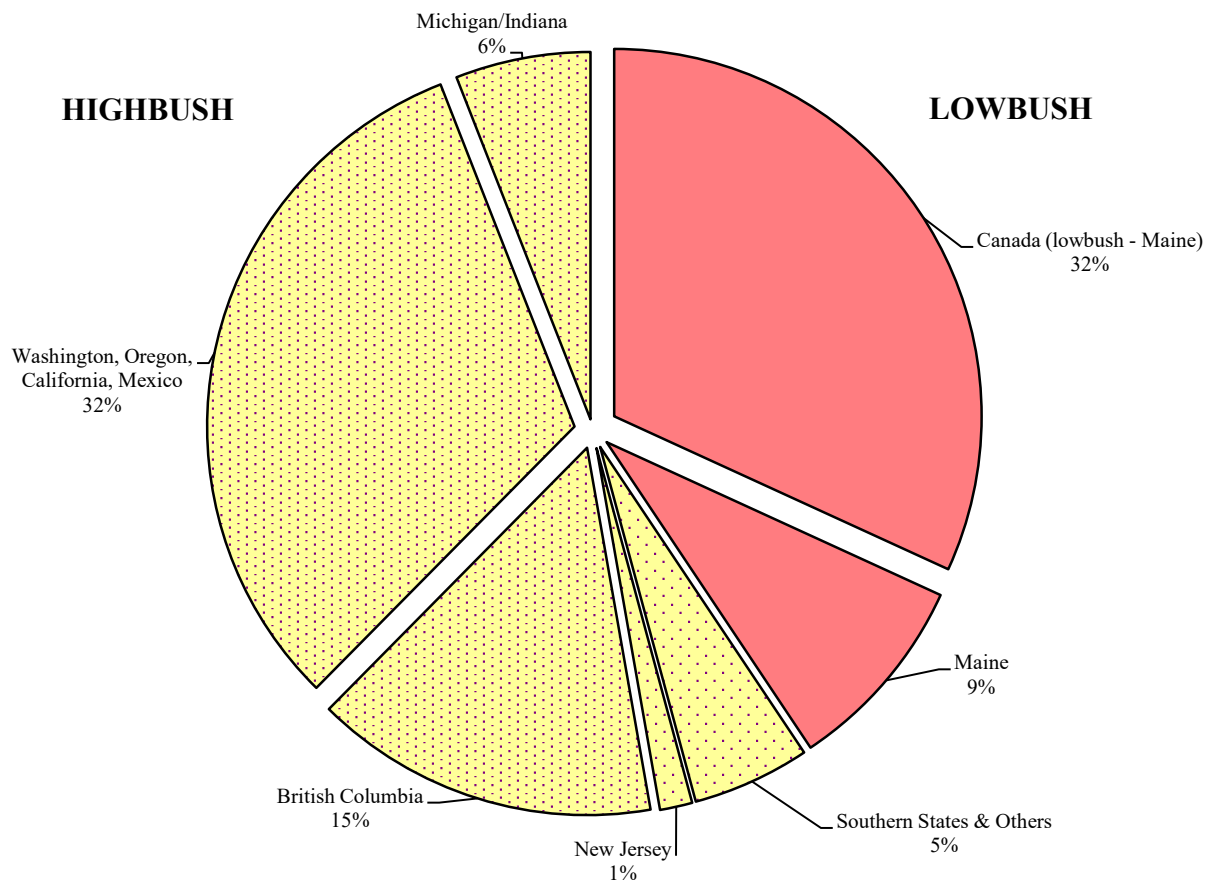
MOST RECENT THREE YEAR AVERAGE 2016-2018

34,467	47,500	26,967	50,867	137,133	109,467	87,738	494,138
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** Also includes: Maine, New York, Arkansas, Alabama, Mississippi, Connecticut, Delaware, Illinois, Kentucky, Louisiana, Maryland, Massachusetts, Minnesota, Missouri, New Hampshire, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Wisconsin, West Virginia (Mexico since 2014)



**2018
NORTH AMERICAN SOURCE OF PROCESSED BLUEBERRIES**



**TOTAL PROCESSED BLUEBERRIES PRODUCED IN 2018:
560,400,000 POUNDS**

**BLUEBERRIES FOR PROCESSING HAD AN ESTIMATED FARM GATE VALUE OF:
\$286,770,700**

Maine, Lowbush Canadian and Michigan blueberries combined represent 46.5% of process tonnage
(260,700,000 Pounds)

2018 total North American process tonnage increased by 5.6% compared to 2017 total
(560.4 million pounds versus 530.8 million pounds).

2018 total farm level income from North American process tonnage increased by 22.1% compared to 2017
(\$286.7 million versus \$234.8 million).

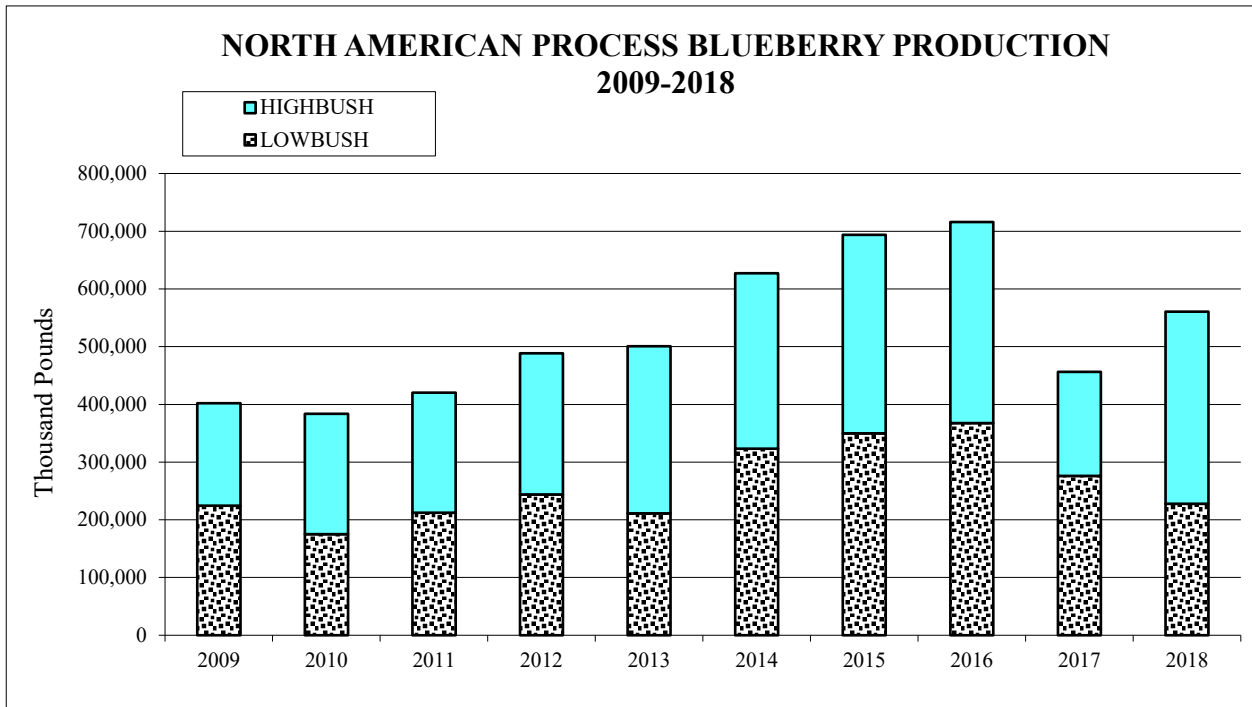
In 2018, process utilization was 55.2% of total production and 28.8% of income.

Source: Value of production: USDA/NASS "Non-citrus Fruits & Nuts Summary" - July 2019 and Stats Canada - 2019

Note: 2017 data revised per USDA/NASS July 2019 report and Stats Canada "Fruit & Vegetable Production", Table 001-0009 May 2019

**NORTH AMERICAN PROCESS BLUEBERRY PRODUCTION
LOWBUSH VS. Highbush
2009-2018
(000 Pounds)**

<u>YEAR</u>	<u>LOWBUSH</u>	<u>%</u>	<u>Highbush</u>	<u>%</u>	<u>TOTAL</u>
2009	224,700	55.9%	177,399	44.1%	402,099
2010	174,920	45.6%	208,959	54.4%	383,879
2011	212,516	50.5%	207,919	49.5%	420,435
2012	244,100	49.9%	244,600	50.1%	488,700
2013	211,100	42.2%	289,400	57.8%	500,500
2014	323,072	51.5%	303,933	48.5%	627,005
2015	349,668	44.8%	344,032	55.2%	693,700
2016	367,386	48.9%	348,315	51.1%	715,701
* 2017	276,314	40.6%	179,856	59.4%	456,170
2018	227,700	40.6%	332,700	59.4%	560,400
TEN YEAR AVERAGE 2009-2018	261,148	47.1%	263,711	52.9%	524,859
MOST RECENT THREE YEAR AVERAGE 2016-2018	290,467	43.4%	286,957	56.6%	577,424



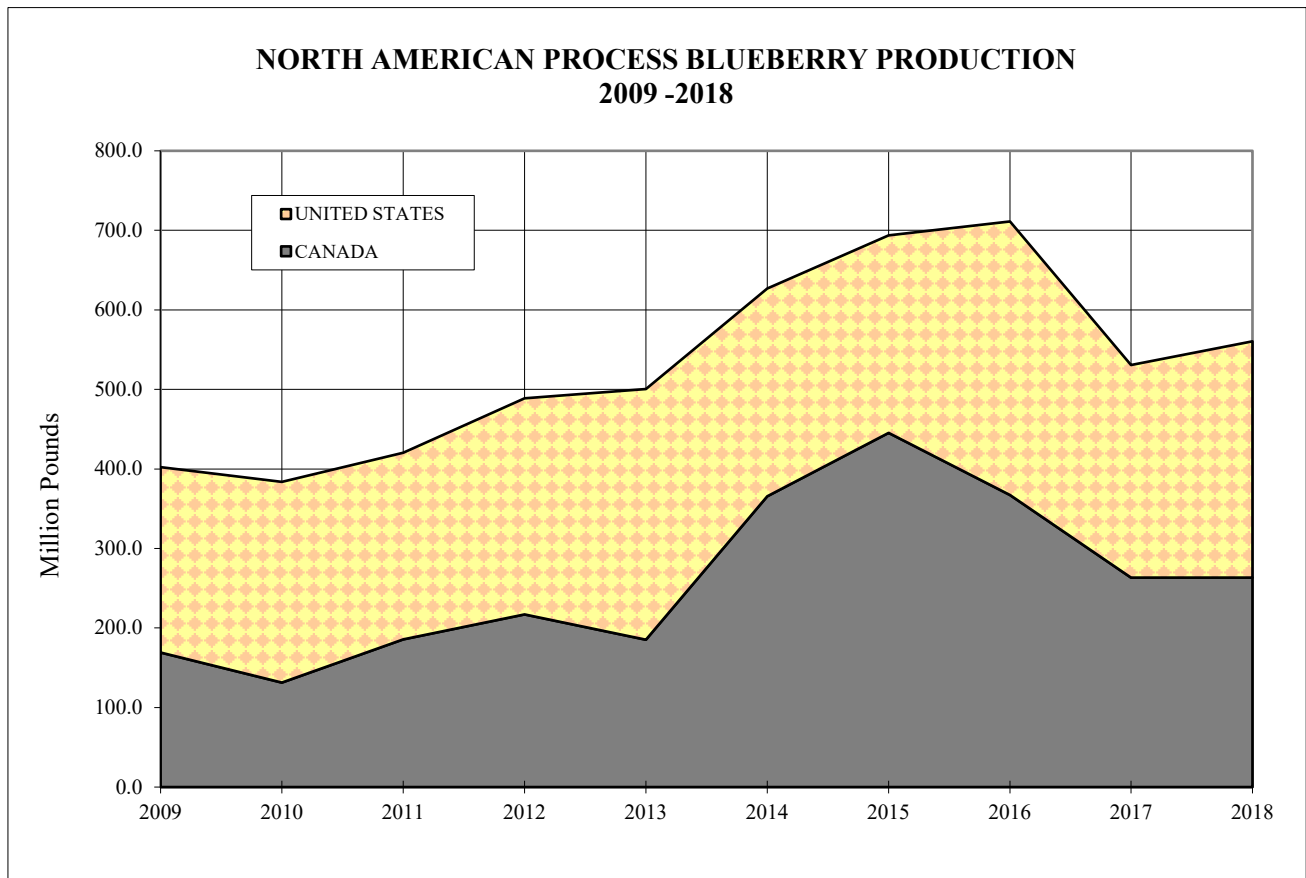
*Numbers revised per USDA/NASS "Non-citrus Fruits & Nuts Summary" - June 2019 and Stats Canada - May 2019

**NORTH AMERICAN PROCESS BLUEBERRY PRODUCTION
CANADA VS. UNITED STATES
2009-2018
(000,000 Pounds)**

<u>YEAR</u>	<u>CANADA</u>	<u>UNITED STATES</u>	<u>TOTAL</u>
2009	169.0	233.1	402.1
2010	131.4	252.5	383.9
2011	185.7	234.7	420.4
2012	217.1	271.6	488.7
2013	185.3	315.2	500.5
2014	365.8	261.2	627.0
2015	445.4	248.3	693.7
2016	367.4	343.8	711.2
2017	263.4	267.4	530.8
2018	263.4	297.0	560.4

10 YEAR AVERAGE 2009-2018 **259.4** **272.5** **531.9**

3 YEAR AVERAGE 2016-2018 **298.1** **302.7** **600.8**



Source: USDA/NASS "Non-citrus Fruits & Nuts Summary" - June 2019 and Stats Canda - May 2019

UNITED STATES PROCESS BLUEBERRY PRODUCTION 2009-2018 (000 Pounds)

YEAR	MAINE	MICHIGAN/ INDIANA	NEW JERSEY	WASH./ OREGON	SOUTHERN STATES & OTHERS*	U.S. PROCESS TOTAL	FROZEN IMPORTS	TOTAL INCLUDING IMPORTS
2009	87,500	51,000	8,000	52,500	34,050	233,050	85,181	318,231
2010	82,500	61,600	7,000	57,100	44,300	252,500	92,921	345,421
2011	82,500	38,400	15,000	59,100	39,700	234,700	111,963	346,663
2012	90,600	54,500	8,500	69,500	48,500	271,600	114,971	386,571
2013	86,600	67,000	4,400	105,500	51,700	315,200	129,378	444,578
2014	104,400	51,000	5,860	116,300	54,230	331,790	132,668	464,458
2015	100,500	31,300	7,600	139,350	71,000	349,750	152,963	502,713
2016	101,260	55,400	6,590	155,850	55,000	374,100	165,546	539,646
2017	67,300	46,600	4,860	134,750	20,100	273,610	136,720	410,330
2018	49,300	33,300	8,000	164,200	40,200	295,000 **	160,155	455,155
TEN YEAR AVERAGE 2009-2018								
	85,246	49,010	7,581	105,415	45,878	293,130	128,247	421,377
MOST RECENT THREE YEAR AVERAGE 2016-2018								
	72,620	45,100	6,483	151,600	38,433	314,237	154,140	468,377

Source: 2018 Production - See Page 1, 2008 to 2017 = USDA/NASS - Non Citrus Fruits & Nuts Summary - June 2019

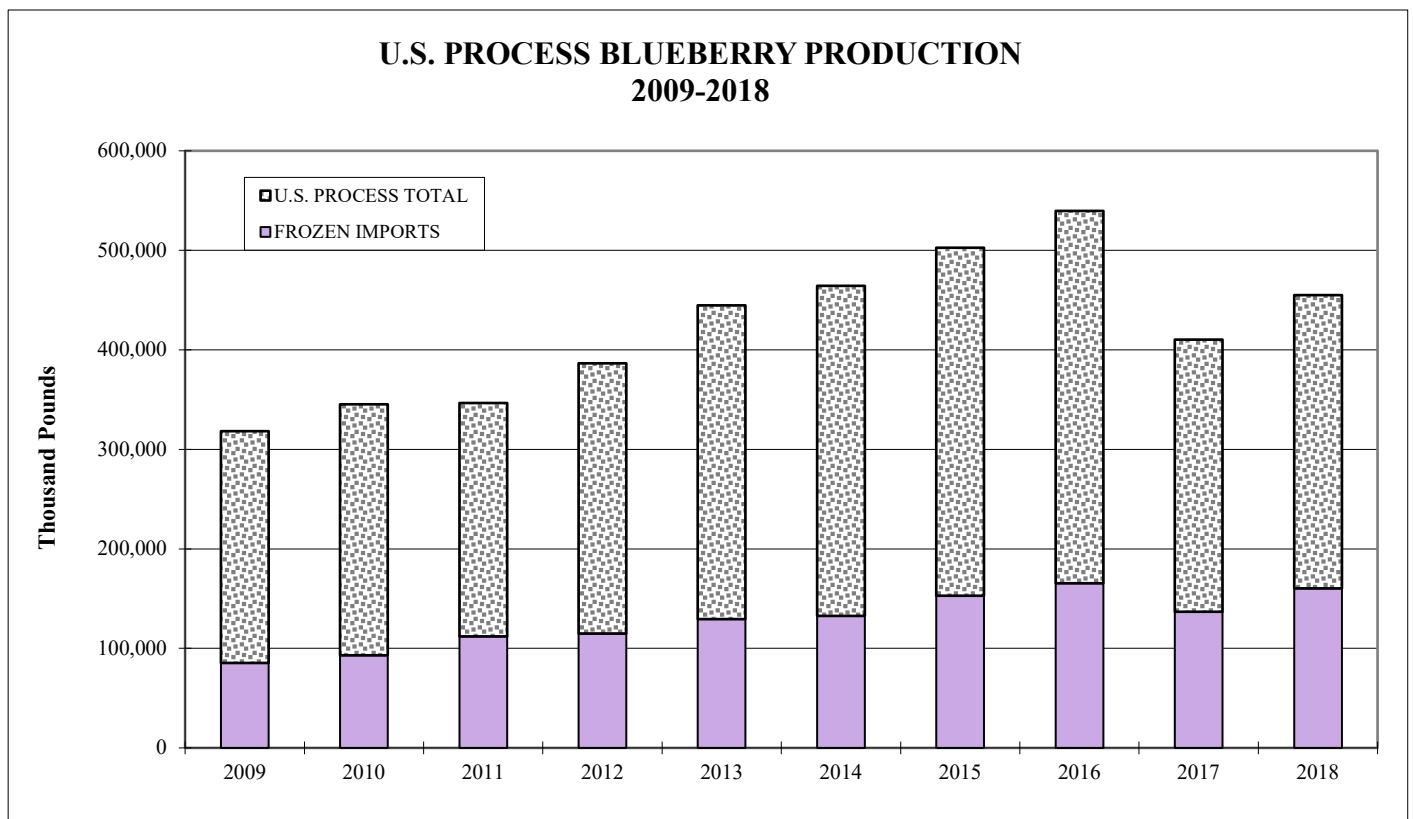
Imports - See page 18 (U.S Census Bureau. Jan-Dec 2018)

*Also Includes North Carolina, Georgia, Florida, Arkansas, Alabama, Mississippi, Louisiana, New York, Texas, and California

**US Highbush Process for 2018 totals 245,700

US Lowbush Process for 2018 totals 49,300

^ 2017 data revised per USDA/NASS "Non-citrus Fruit & Nuts Summary" - June 2019 (when info not available, prior year nabc estimate is added in)



CANADIAN PROCESS BLUEBERRY PRODUCTION*
2009-2018
(000,000 Pounds)

<u>YEAR</u>	<u>NOVA SCOTIA</u>	<u>QUEBEC</u>	<u>BRITISH COLUMBIA</u>	<u>NEW BRUNS.</u>	<u>NEW-FOUNDLAND</u>	<u>P.E.I.</u>	<u>TOTAL</u>
2009	33.0	67.2	34.4	23.5	0.5	10.4	169.0
2010	32.8	13.0	40.0	32.6	0.2	12.4	131.0
2011	29.4	61.1	54.1	27.6	0.2	13.3	185.7
2012	40.0	53.8	65.9	45.0	1.0	11.4	217.1
2013	39.1	29.5	60.8	42.6	0.0	13.3	185.3
2014	63.5	73.2	86.6	58.9	1.0	22.1	305.3
2015	65.1	49.8	104.0	78.0	0.0	17.5	314.4
2016	38.6	117.0	110.0	83.0	0.2	27.0	375.8
^2017	48.4	78.4	60.3	53.3	0.0	23.5	263.9
2018	21.0	85.2	85.0	53.5	0.0	18.7	263.4

10 YEAR AVERAGE 2009-2018

41.1	62.8	70.1	49.8	0.3	17.0	241.1
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MOST RECENT 3 YEAR AVERAGE 2016-2018

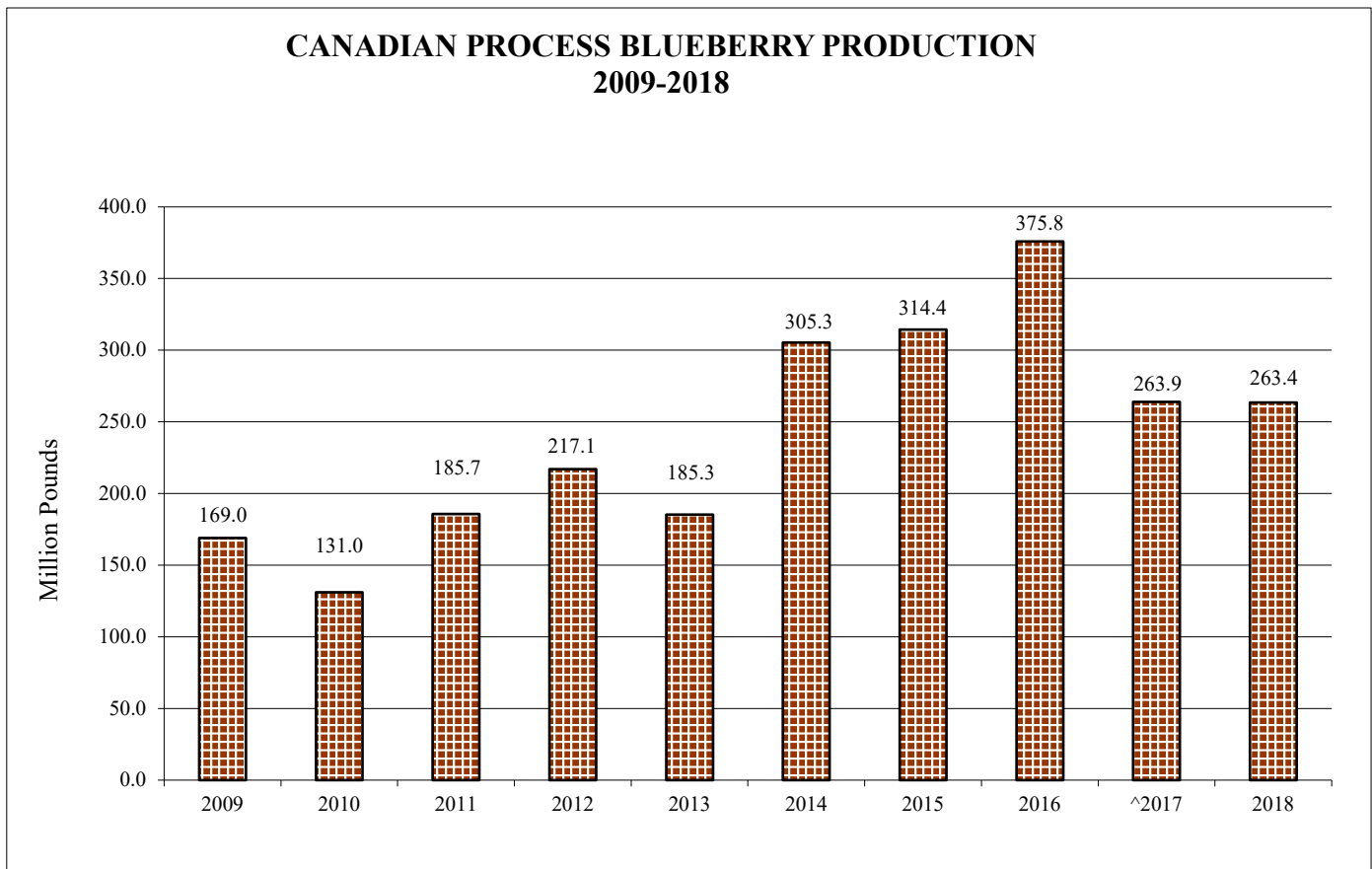
36.0	93.5	85.1	63.3	0.1	23.1	301.0
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*Ontario not included, 0 process production to date.

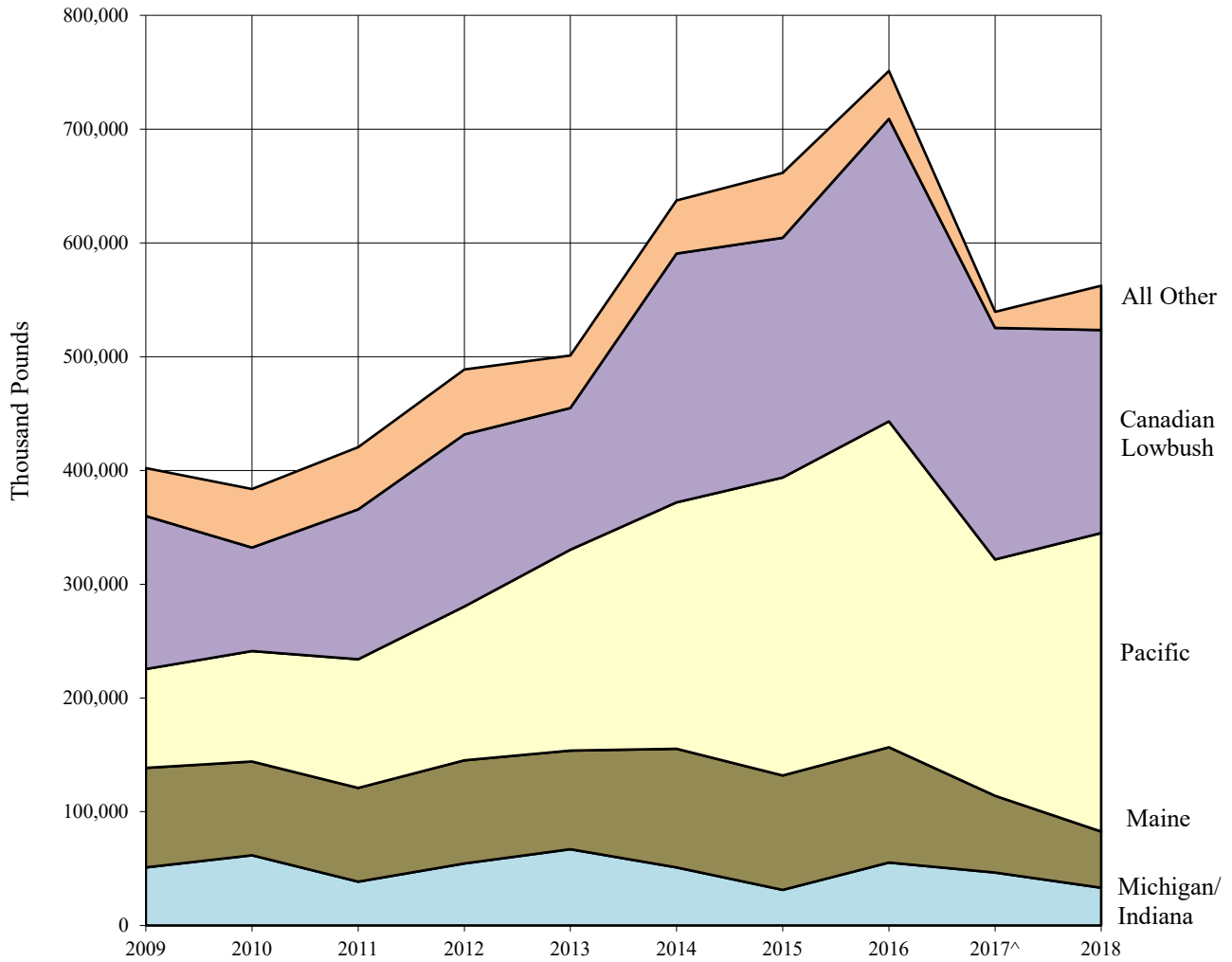
**Average of 171.0 million pounds Lowbush; 70.1 million pounds Highbush.

^2017 Data revised per Stats Canada - April 2019

Source: 2018 Production- see Page 1. 2009-2017=Stats Canada with NABC adjustments for estimated fresh production.



NORTH AMERICAN PROCESS BLUEBERRY TREND BY PRODUCTION AREA 2009-2018



PACIFIC: British Columbia, Oregon, Washington and California combined.

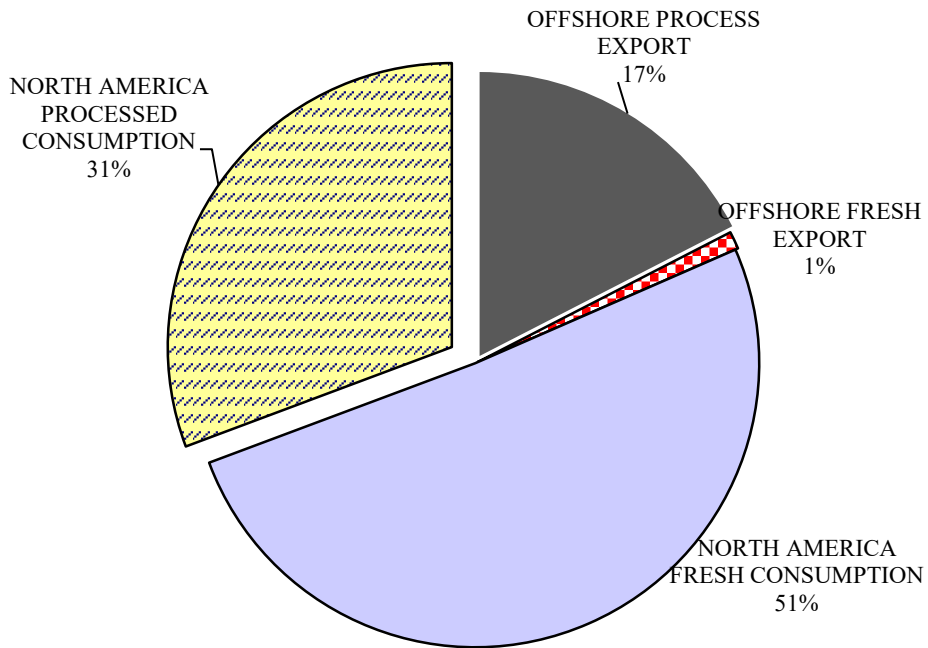
ALL OTHER AREAS: New Jersey, New York, North Carolina, Georgia, Arkansas, Florida, Mississippi & Other Southern States.

CANADIAN LOWBUSH: Nova Scotia, Quebec, New Brunswick, Newfoundland, & Prince Edward Island.

^2017 data revised per USDA/NASS 2018 & Stats Canada - 2019

*Mexico added since 2014

**2018
ESTIMATED UTILIZATION OF
NORTH AMERICAN BLUEBERRIES**



**2018 CROP PRODUCTION TOTAL:
1,016,000,000 POUNDS**

**TOTAL ESTIMATED FARM GATE VALUE:
\$996,251,700**

ESTIMATED 2018 CROP UTILIZATION:

NORTH AMERICA FRESH CONSUMPTION:	446,824,923	POUNDS
OFFSHORE FRESH EXPORT:	8,775,077	POUNDS
NORTH AMERICAN PROCESSED CONSUMPTION:	269,662,000	POUNDS
OFFSHORE PROCESS EXPORT:	153,291,101	POUNDS
TOTAL UTILIZATION:	878,553,101	POUNDS

2017 AND 2018 NORTH AMERICAN BLUEBERRY IMPORTS AND EXPORTS

UNITED STATES

IMPORTS			EXPORTS		
FRESH:	<u>2017 POUNDS</u>	<u>2018 POUNDS</u>	FRESH:	<u>2017 POUNDS</u>	<u>2018 POUNDS</u>
CHILE	132,321,465	151,141,928	CANADA	49,685,751	37,401,859
PERU	41,724,401	81,925,652	BELGIUM	1,612,797	2,481,202
MEXICO	53,246,394	71,414,035	SOUTH KOREA	3,353,432	1,379,509
CANADA	69,984,222	68,909,039	JAPAN	665,798	781,500
ARGENTINA	21,911,967	19,858,607	MEXICO	476,355	755,501
URUGUAY	1,272,191	1,586,441	SINGAPORE	361,751	546,481
ECUADOR	0	89,595	UNITED ARAB EMIRATES	290,386	421,614
BRAZIL	0	50,441	TAIWAN	528,542	337,379
GUATEMALA	59,998	22,952	AUSTRALIA	152,922	208,939
REP. OF S. AFRICA	0	22,072	UNITED KINGDOM	915,271	173,916
ANTIQUE AND BARBUDA	0	2,630	HONG KONG	363,865	173,709
COLUMBIA	0	1,334	CHINA	211,807	109,258
NEW ZEALAND	12,952	0	PHILIPPINES	35,357	105,367
MOROCCO	1,874	0	THAILAND	45,944	97,137
POLAND	0	0	MALAYSIA	29,182	74,923
NETHERLANDS	0	0	BAHAMAS	51,513	49,716
FRESH TOTAL:	320,535,465	395,024,728	QATAR	49,235	38,909
			TRINIDAD	899	30,212
			SAUDI ARABIA	42,732	18,430
			NETHERLANDS	0	17,474
			BERMUDA	4,164	11,887
			COSTA RICA	3,000	10,944
			ARUBA	5,397	10,097
			FRANCE	0	8,772
			CAYMAN	0	7,983
			OMAN	0	7,776
			GUATEMALA	0	6,684
			BURMA	0	3,252
			EL SALVADOR	1,429	2,881
			SWITZERLAND	1,601	2,474
			CAMBODIA	0	1,764
			KUWAIT	0	1,232
			TURK ISLAND	0	968
			ICELAND		882
			PERU	8,622	0
			INDONESIA	5,077	0
			VIETNAM	4,949	0
			DOMINICAN REPUBLIC	4,572	0
			SPAIN	2,831	0
			PANAMA	791	0
			GERMANY	0	0
			IRELAND	0	0
			TURKEY	0	0
			NORWAY	0	0
			URUGUAY	0	0
			REP OF SOUTH AFRICA	0	0
			FRESH TOTAL:	58,915,973	45,280,630
FROZEN:	<u>2017 POUNDS</u>	<u>2018 POUNDS</u>			
CANADA	101,631,436	113,959,253			
CHILE	30,124,854	37,084,009			
ARGENTINA	4,261,659	4,004,954			
PERU	0	3,286,366			
MEXICO	476,643	1,507,393			
SWITZERLAND	0	153,773			
UKRAINE	117,814	91,579			
CHINA	30,582	25,088			
ITALY	0	15,520			
FRANCE	1,102	10,196			
SWEEDEN	0	9,967			
POLAND	1,380	6,938			
SERBIA	0	809			
INDIA	39,601	0			
ESTONIA	13,001	0			
BRAZIL	11,111	0			
FINLAND	10,399	0			
FROZEN TOTAL	136,719,583	160,155,845			
GRAND TOTAL:	<u>457,255,048</u>	<u>555,180,573</u>			

SOURCE: US Bureau of Census, Department of
 Commerce Foreign Trade Division.
 CALENDAR YEAR (JANUARY TO DECEMBER)
 TOTAL = BOTH HIGHBUSH & LOWBUSH BLUEBERRIES
 * TOTALS BASED ON ROUNDED CONVERSIONS FROM KILOGRAMS.

2017 AND 2018 NORTH AMERICAN BLUEBERRY IMPORTS AND EXPORTS (CON'T)

UNITED STATES

FROZEN:	<u>2017 POUNDS</u>	<u>2018 POUNDS</u>
CANADA	25,406,448	18,956,189
SOUTH KOREA	8,112,461	7,710,774
JAPAN	5,123,144	4,463,896
AUSTRALIA	1,534,721	3,033,779
NETHERLANDS	1,166,632	1,362,844
GERMANY	1,124,439	1,338,214
MEXICO	2,063,402	1,188,881
POLAND	2,189,093	730,642
UNITED KINGDOM	1,113,197	624,224
CHINA	2,125,067	241,448
BELGIUM	378,206	231,483
INDIA	171,884	217,094
ISRAEL	124,875	173,539
COSTA RICA	53,982	163,235
COLOMBIA	126,465	151,754
TAIWAN	1,173,703	147,966
GUATEMALA	87,448	121,271
FRANCE	0	92,593
HAITI	0	92,593
TRINIDAD	58,817	56,458
JAMAICA	22,873	54,176
NEW ZEALAND	133,418	52,507
BRAZIL	0	51,200
INDONESIA	51,334	50,812
PANAMA	16,404	49,299
VIETNAM	0	47,619
PHILIPPINES	74,705	39,751
EL SALVADOR	11,574	32,780
HONDURAS	45,238	28,722
SINGAPORE	11,989	18,287
QATAR	0	14,899
BARBADOS	9,359	12,692
BERMUDA	0	8,069
NICARAGUA	2,998	5,941
BAHAMAS	0	4,414
MALAYSIA	26,054	4,398
UNITED ARAB EMIRATES	59,451	2,776
CHILE	52,547	1,365
BAHRAIN	8,382	871
DENMARK	375,174	0
LATIVA	46,297	0
OMAN	13,803	0
DOMINICAN REPUBLIC	4,200	0
ARUBA	3,840	0
SAUDI ARABIA	959	0
HONG KONG	0	0
SERBIA	0	0
AUSTRIA	0	0
CROATIA	0	0
ICELAND	0	0
THAILAND	0	0
EGYPT	0	0
CAYMAN	0	0
FROZEN TOTAL:	53,104,581	41,579,455
<u>GRAND TOTAL:</u>	<u>112,020,554</u>	<u>86,860,085</u>

2017 AND 2018 NORTH AMERICAN BLUEBERRY IMPORTS AND EXPORTS

CANADA

IMPORTS			EXPORTS		
	<u>2017 POUNDS*</u>	<u>2018 POUNDS</u>		<u>2017 POUNDS*</u>	<u>2018 POUNDS</u>
FRESH:			FRESH:		
UNITED STATES	53,759,255	46,307,967	UNITED STATES	69,611,103	68,923,186
CHILE	18,438,845	19,215,988	HONG KONG	293,412	390,318
PERU	5,973,946	12,124,219	SINGAPORE	294,945	178,705
MEXICO	4,025,864	5,589,953	CHINA	369,043	103,524
ARGENTINA	1,682,948	2,068,162	JAPAN	51,482	59,491
URUGUAY	246,357	316,845	TAIWAN	80,574	40,898
FRANCE	0	35,582	IRELAND	0	38,120
AUSTRALIA	3,393	9,579	INDONESIA	78,649	30,657
SWITZERLAND		342	NETHERLANDS	0	15,992
NEW ZEALAND	0	26	ISRAEL	0	11,118
PHILIPPINES	32,381	0	MALAYSIA	37,335	8,303
COLUMBIA	959	0	INDIA	675	6,645
BRAZIL	55	0	THAILAND	20,922	3,900
ITALY	0	0	ITALY	0	2,934
ANTIGUA BARBUDA	0	0	UNITED ARAB EMIRATES	2,282	2,540
BELGIUM	0	0	CAMBODIA	159	1,841
			BAHRAIN	1,349	635
			SAINT PIERRE	265	593
FRESH TOTAL:	84,164,002	85,668,663	SWITZERLAND	0	42
			GERMANY	154,615	26
			FRANCE	853	26
			AUSTRALIA	215,579	0
FROZEN:			SOUTH KOREA	11,045	0
UNITED STATES	26,365,237	19,170,505	UNITED KINGDOM	10,906	0
CHILE	2,086,204	2,753,799	VIETNAM	2,778	0
ARGENTINA	1,371,100	250,297	NORWAY	2,264	0
FRANCE	24,522	48,450	SAUDI ARABIA	0	0
SWEDEN	0	42,225			
UKRAINE	0	12,566	FRESH TOTAL	71,240,234	69,819,492
MEXICO	119	2,185			
SERBIA	0	1,559	FROZEN:		
TURKEY	0	1,190	UNITED STATES	101,658,469	113,827,367
CHINA	450	1,124	GERMANY	29,084,426	31,678,984
PHILIPPINES	2,604	472	JAPAN	21,293,607	23,348,588
SURINAME	0	238	POLAND	8,325,346	12,858,147
SLOVENIA	0	79	CHINA	9,479,692	10,933,088
ECUADOR	0	79	BELGIUM	9,148,034	9,495,064
PERU	0	49	NETHERLANDS	7,657,568	9,352,456
POLAND	5,952	20	SWITZERLAND	5,177,122	6,706,459
ALBANIA	0	11	FRANCE	6,777,844	5,329,905
JAPAN	83,471	0	UNITED KINGDOM	2,600,500	3,911,018
PERU	52,970	0	ITALY	2,213,251	2,733,424
NETHERLANDS	9,171	0	AUSTRALIA	3,784,322	2,632,548
LITHUANIA	2,403	0	AUSTRIA	1,944,453	2,037,172
			NEW ZEALAND	1,826,765	1,331,433
FROZEN TOTAL:	30,004,203	22,284,849	SERBIA	97,558	1,468,283
			SWEDEN	307,257	936,175
GRAND TOTAL:	114,168,205	107,953,512	CZECH REPUBLIC	371,947	930,917
			PHILIPPINES	421,537	777,298
			TAIWAN	509,882	763,343
			NORWAY	410,704	574,819
			DENMARK	409,394	495,444
			BULGARIA	152,997	455,122
			SOUTH KOREA	489,926	452,391
			PORTUGAL	767,684	410,691
			UKRAINE	195,495	305,734
			CHILE	0	288,009
			VIETNAM	0	254,431
			IRELAND	101,998	206,895

SOURCE: STATISTICS CANADA "TOTAL IMPORTS AND TOTAL EXPORTS 2017" CODE CRO-0124975

*Revised for 2017 per Stats Canada - May 2019

Totals based on rounded conversions from kilograms.

2017 AND 2018 NORTH AMERICAN BLUEBERRY IMPORTS AND EXPORTS

CANADA

	EXPORTS	
	<u>2017 POUNDS*</u>	<u>2018 POUNDS</u>
FROZEN:		
MALAYSIA	52,469	174,223
BRAZIL	255,213	157,510
SWAZILAND	0	157,408
TURKEY	51,449	154,346
ISRAEL	170,592	152,261
THAILAND	27,125	105,175
INDONESIA	99,123	100,757
MONTENEGRO	0	96,958
INDIA		86,127
ROMANIA	50,999	50,999
SOUTH AFRICA	0	50,999
BOSNIA AND HERZEGOVINA	0	47,972
SINGAPORE	0	44,998
LATVIA	4,762	40,946
HONG KONG	401	22,500
SAINT PIERRE & MIQUELON	399	622
CROATIA	50,999	0
MYANMAR	47,999	0
UNITED ARAB EMIRATES	882	0
BAHRAIN	708	0
LITHUANIA	203,703	0
FROZEN TOTAL:	215,713,214	245,607,270
GRAND TOTAL:	<u>286,953,448</u>	<u>315,426,763</u>

NORTH AMERICAN FRESH IMPORTS OF SOUTHERN HEMISPHERE BLUEBERRIES 2009-2018 (Millions of Pounds)

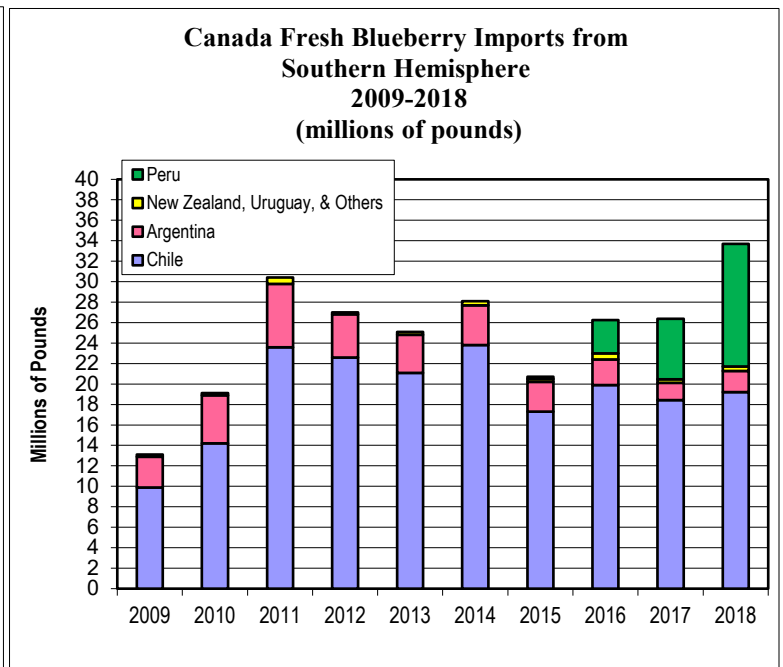
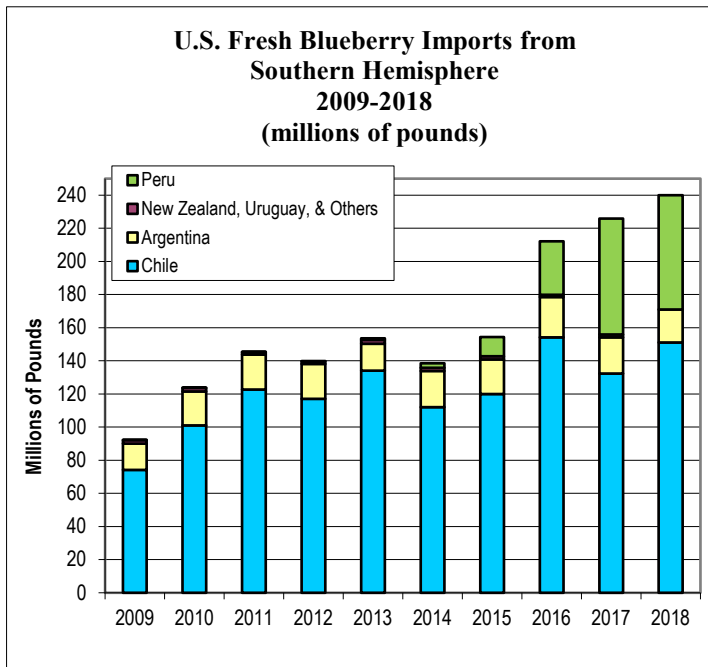
FRESH IMPORTS

YEAR	U.S. IMPORTS					CANADIAN IMPORTS					North America
	Chile	Argentina	Peru	Uruguay	Others*	Chile	Argentina	Peru	Uruguay	Others ^	Total
2009	74.2	15.9	0.0	1.0	0.25	9.9	3.0	0.0	0.2	0.00	104.5
2010	101	20.5	0.1	1.8	0.24	14.2	4.7	0.0	0.2	0.00	142.7
2011	122.7	21.0	0.1	2.0	0.17	23.6	6.2	0.0	0.6	0.00	176.4
2012	117.1	21.0	0.0	1.4	0.11	22.6	4.2	0.0	0.2	0.00	166.6
2013	134.1	16.2	1.0	1.4	0.10	21.1	3.7	0.0	0.3	0.00	178.0
2014	112.0	21.9	2.6	2.2	0.14	23.8	3.9	0.0	0.4	0.00	169.0
2015	119.9	20.9	11.6	1.9	0.06	17.3	2.9	0.2	0.3	0.00	177.1
2016	154.2	24.3	32.3	2.0	0.03	19.9	2.5	3.3	0.5	0.10	177.1
2017	132.3	21.9	70.0	1.3	0.03	18.4	1.7	5.9	0.2	0.10	251.9
2018	151.1	19.9	68.9	1.6	0.07	19.2	2.1	12.0	0.3	0.10	275.3
10 YEAR AVERAGE											
2009-2018	121.9	20.3	18.66	1.65	0.12	19.0	3.49	2.1	0.3	0.03	181.86
3 YEAR AVERAGE											
2016-2018	145.9	22.0	57.1	1.6	0.0	19.2	2.1	7.1	0.4	0.10	234.8

Source: U.S. Bureau of Census Department of Commerce, Foreign Trade Division, and Stats Canada (Calendar Year).

* Includes: New Zealand

^ Includes: Peru, Australia, Brazil



**UNITED STATES BLUEBERRY IMPORTS AND EXPORTS
2009-2018
(000 Pounds)**

YEAR	<i>IMPORTS:</i>			<i>EXPORTS:</i>		
	<u>FROZEN</u>	<u>FRESH</u>	<u>TOTAL</u>	<u>FROZEN</u>	<u>FRESH</u>	<u>TOTAL</u>
2009	85,181	133,267	218,448	20,002	64,198	84,200
2010	92,921	169,189	262,110	32,878	69,064	101,942
2011	111,963	192,541	304,504	36,176	78,490	114,666
2012	114,971	212,451	327,422	44,676	73,579	118,255
2013	129,378	228,180	357,558	47,908	84,387	132,295
2014	132,668	234,743	367,411	55,851	79,082	134,933
2015	152,963	270,525	423,488	51,485	63,014	114,499
2016	166,546	350,309	516,855	56,105	69,889	125,994
2017	136,720	320,535	457,255	53,105	58,916	112,021
2018	160,156	395,025	555,181	41,579	45,281	86,860

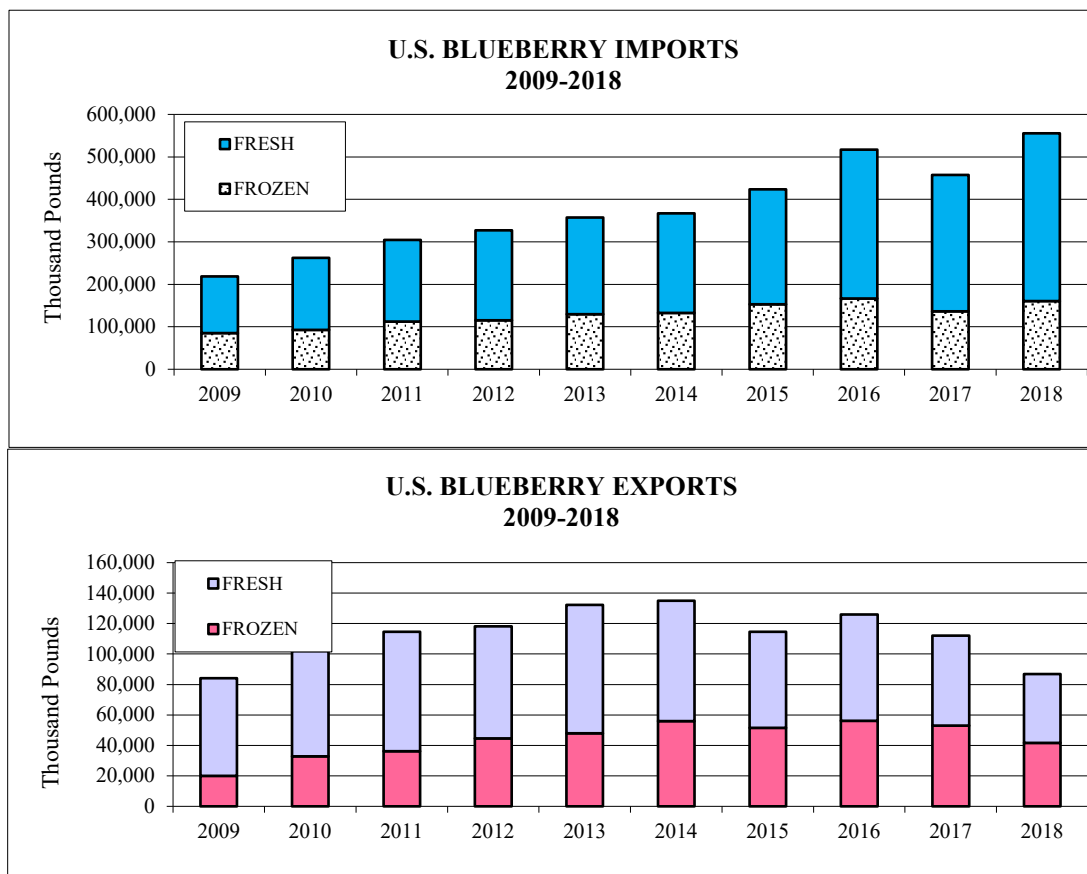
10 YEAR AVERAGE 2009-2018

128,347	250,677	379,023	43,977	68,590	112,566
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3 YEAR AVERAGE 2016-2018

154,474	355,290	509,764	50,263	58,029	108,292
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Source: U.S. Bureau of Census Calendar Year



**U.S. BLUEBERRY EXPORTS - CROP YEAR BASIS
(JULY TO JUNE)
2002/03 TO 2018/19
(THOUSANDS OF POUNDS)**

<u>CROP YEAR</u>	FRESH EXPORTS*			FROZEN EXPORTS*		
	<u>LOWBUSH</u>	<u>HIGHBUSH</u>	<u>TOTAL</u>	<u>LOWBUSH</u>	<u>HIGHBUSH</u>	<u>TOTAL</u>
2002/03	26,876	9,453	36,329	15,352	9,537	24,889
2003/04	30,543	16,317	46,860	23,273	8,041	31,314
2004/05	17,350	15,736	33,086	17,682	9,703	27,385
2005/06	31,758	22,248	54,006	13,366	10,428	23,794
2006/07	28,194	20,423	48,617	19,025	13,210	32,235
2007/08	28,466	26,439	54,905	20,344	16,265	36,609
2008/09	34,973	32,414	67,387	10,641	9,950	20,591
2009/10	31,744	37,588	69,332	7,621	14,951	22,572
2010/11	34,463	45,209	79,672	21,838	15,459	37,297
2011/12	31,026	48,174	79,200	17,596	21,373	38,969
2012/13	26,146	41,258	67,404	22,804	25,873	48,677
2013/14	36,833	47,583	84,416	20,069	33,861	53,930
2014/15	35,175	44,428	79,603	18,259	36,237	54,495
2015/16	23,152	37,854	61,006	17,034	32,797	49,831
2016/17	30,396	31,095	61,490	21,989	31,711	53,700
2017/18	22,538	32,333	54,871	21,464	32,247	53,711
2018/19	2,245	47,122	49,367	8,636	31,439	40,075

Source: Derived from U.S. Bureau of Census - Department of Commerce, Foreign Trade Division Data.

* Includes exports to Canada.

**2018 U.S. FRESH BLUEBERRY EXPORTS
HIGHBUSH VERSUS LOWBUSH
(POUNDS)**

FRESH EXPORTS:

COUNTRY	HIGHBUSH POUNDS	HIGHBUSH % OF TOTAL U.S. EXPORT	LOWBUSH POUNDS	LOWBUSH % OF TOTAL U.S. EXPORT	2018 TOTAL
CANADA	37,053,563.18	99%	348,296	1%	37,401,859
BELGIUM	22,233	1%	2,458,969	99%	2,481,202
SOUTH KOREA	1,119,207	81%	260,302	19%	1,379,509
JAPAN	649,607.44	83%	131,892	17%	781,500
MEXICO	367,006	49%	388,495	51%	755,501
SINGAPORE	453,252.53	83%	93,228	17%	546,481
UNITED ARAB EMIRATES	421,614	100%	0	0%	421,614
TAIWAN	307,831	91%	29,548	9%	337,379
AUSTRALIA	208,939	100%	0	0%	208,939
UNITED KINGDOM	113,956	66%	59,961	34%	173,916
HONG KONG	138,171.10	80%	35,538	20%	173,709
CHINA	61,259	56%	47,999	44%	109,258
PHIL REP	64,992	62%	40,375	38%	105,367
THAILAND	91,784	94%	5,353	6%	97,137
MALAYSIA	74,923	100%	0	0%	74,923
BAHAMAS	43,389	87%	6,327	13%	49,716
QATAR	0	0%	38,909	100%	38,909
TRINIDAD	542	2%	29,670	98%	30,212
SAUDI ARABIA	8,609	47%	9,821	53%	18,430
NETHERLANDS	17,474	100%	0	0%	17,474
BERMUDA	11,887	100%	0	0%	11,887
COSTA RICA	10,944	100%	0	0%	10,944
ARUBA	10,097	100%	0	0%	10,097
FRANCE	0	0%	8,772	100%	8,772
CAYMAN ISLANDS	7,983	100%	0	0%	7,983
OMAN	0	0%	7,776	100%	7,776
GUATEMALA	6,684	100%	0	0%	6,684
BURMA	3,252	100%	0	0%	3,252
EL SALVADOR	2,881	100%	0	0%	2,881
SWITZERLAND	2,474	100%	0	0%	2,474
CAMBODIA	1,764	100%	0	0%	1,764
KUWAIT	0	0%	1,232	100%	1,232
TURK ISLANDS	968	100%	0	0%	968
ICELAND	0	0%	882	100%	882
FRESH TOTAL:	41,277,286	91%	4,003,344	9%	45,280,630

Note: Fresh exports excluding Canada total 7,878,771 pounds of which Highbush accounts for 54% (4,223,723 pounds) and Lowbush accounts for 46% (3,655,048 pounds)

Source: U.S. Bureau of Census-Department of Commerce, Foreign Trade Division.

**2018 U.S. FROZEN BLUEBERRY EXPORTS
HIGHBUSH VERSUS LOWBUSH
(POUNDS)**

FROZEN EXPORTS:

COUNTRY	HIGHBUSH POUNDS	HIGHBUSH % OF TOTAL U.S. EXPORT	LOWBUSH POUNDS	LOWBUSH % OF TOTAL U.S. EXPORT	2018 TOTAL
CANADA	13,247,750	70%	5,708,439	30%	18,956,189
SOUTH KOREA	6,735,578	87%	975,196	13%	7,710,774
JAPAN	4,235,107	95%	228,789	5%	4,463,896
AUSTRALIA	3,021,435	100%	12,344	0%	3,033,779
NETHERLANDS	512,457	38%	850,387	62%	1,362,844
GERMANY	0	0%	1,338,214	100%	1,338,214
MEXICO	254,389	21%	934,492	79%	1,188,881
POLAND	243,886	33%	486,756	67%	730,642
UNITED KINGDOM	574,215	92%	50,009	8%	624,224
CHINA	166,209	69%	75,239	31%	241,448
BELGIUM	185,186	80%	46,297	20%	231,483
INDIA	174,648	80%	42,445	20%	217,093
ISRAEL	136,061	78%	37,478	22%	173,539
COSTA RICA	161,685	99%	1,550	1%	163,235
COLOMBIA	151,754	100%	0	0%	151,754
TAIWAN	117,102	79%	30,864	21%	147,966
GUATEMALA	121,271	100%	0	0%	121,271
FRANCE	92,593	100%	0	0%	92,593
HAITI	92,593	100%	0	0%	92,593
TRINIDAD	33,860	60%	22,597	40%	56,457
JAMAICA	48,159	89%	6,016	11%	54,175
NEW ZEALAND	0	0%	52,507	100%	52,507
BRAZIL	51,200	100%	0	0%	51,200
INDONESIA	0	0%	50,812	100%	50,812
PANAMA	47,242	96%	2,057	4%	49,299
VIETNAM	0	0%	47,619	100%	47,619
PHILIPPINES	8,825	22%	30,926	78%	39,751
EL SALVADOR	32,780	100%	0	0%	32,780
HONDURUS	28,722	100%	0	0%	28,722
SINGAPORE	18,287	100%	0	0%	18,287
QATAR	0	0%	14,899	100%	14,899
BARBADOS	12,692	100%	0	0%	12,692
BERMUDA	8,069	100%	0	0%	8,069
NICARAGUA	5,941	100%	0	0%	5,941
BAHAMAS	3,102	70%	1,312	30%	4,414
MALAYSA	4,398	100%	0	0%	4,398
UNITED ARAB EMIRATES	2,776	100%	0	0%	2,776
CHILE	1,365	100%	0	0%	1,365
BAHRAIN	871	100%	0	0%	871
FROZEN TOTAL:	30,532,208	73%	11,047,244	27%	41,579,452

Note: Frozen exports excluding Canada total 22,623,263 pounds of which Highbush accounts for 76% of the total (17,284,458 pounds) and Lowbush accounts for 24% of the total (5,338,805 pounds) Source: U.S. Bureau of Census - Department of Commerce, Foreign Trade Division

CANADIAN BLUEBERRY IMPORTS & EXPORTS 2009-2018 (000 POUNDS)

YEAR	IMPORTS			EXPORTS		
	FROZEN	FRESH	TOTAL	FROZEN	FRESH	TOTAL
2009	5,910	71,835	77,745	124,815	42,436	167,251
2010	18,236	82,493	100,729	146,977	45,335	192,312
2011	24,036	102,018	126,054	157,981	44,291	202,272
2012	26,690	94,687	121,377	167,002	65,490	232,492
2013	26,551	110,461	137,012	156,908	66,332	223,240
2014	29,233	96,653	125,886	168,749	77,390	246,139
2015	22,616	75,370	97,986	196,789	92,052	288,841
2016	34,325	92,554	126,878	208,969	81,681	290,650
^2017	30,004	84,164	114,168	215,713	71,240	286,953
2018	22,285	85,669	107,954	245,607	69,819	315,427

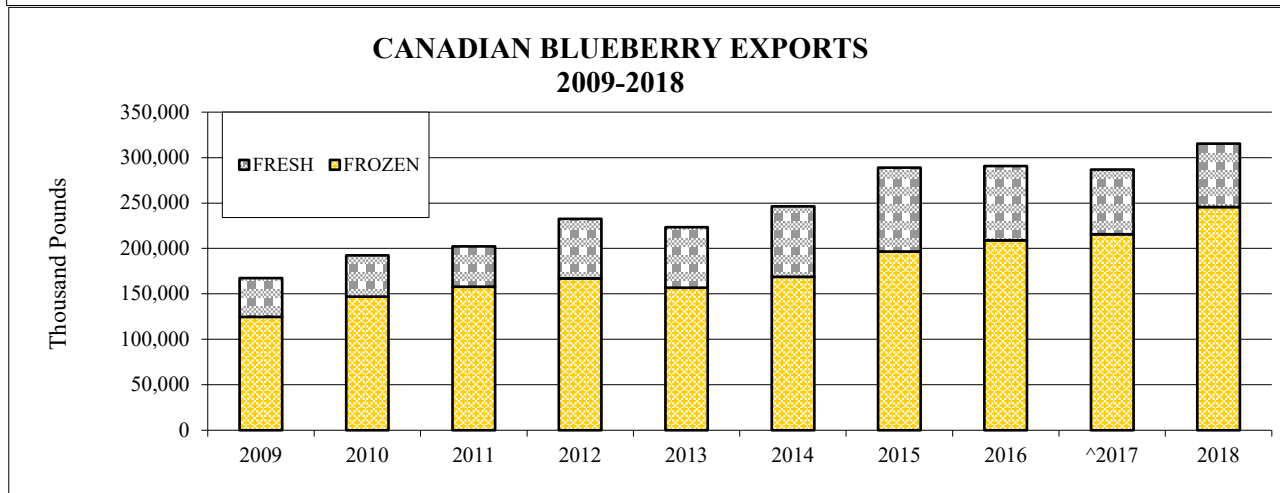
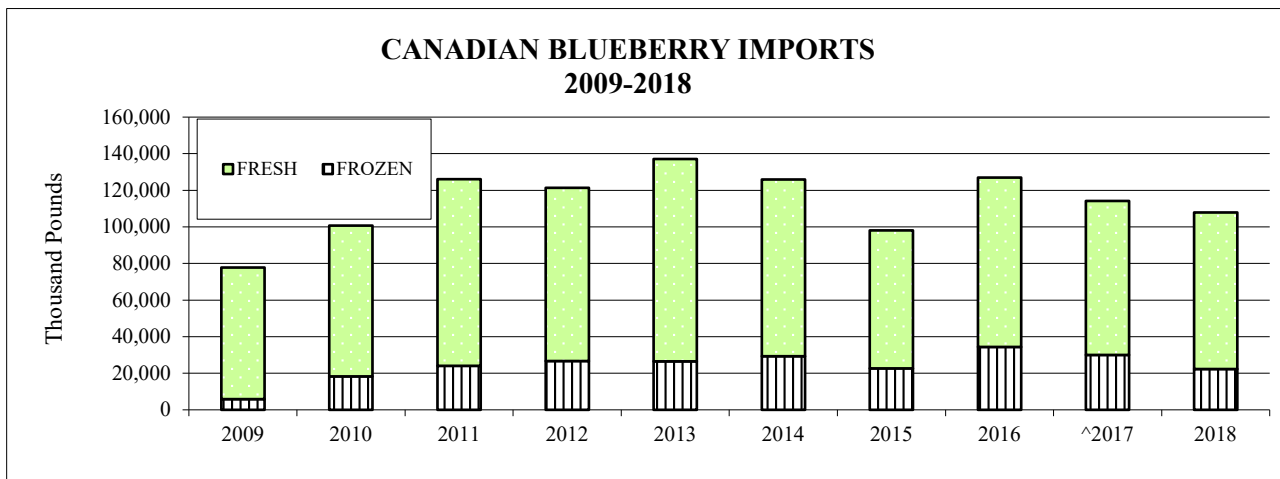
10 year average 2009-2018

23,989	89,590	113,579	178,951	65,607	244,558
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3 year average 2016-2018

28,871	87,462	116,333	223,430	74,247	297,677
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Source: Stats Canada



^Revised for 2017 per Stats Canada - March 2019

**2018 CANADIAN FRESH BLUEBERRY EXPORTS
HIGHBUSH VERSUS LOWBUSH
(POUNDS)**

FRESH EXPORTS:

COUNTRY	HIGHBUSH POUNDS	HIGHBUSH % OF TOTAL EXPORT	LOWBUSH POUNDS	LOWBUSH % OF TOTAL EXPORT	2018 TOTAL
UNITED STATES	56,682,493	82%	12,240,693	18%	68,923,186
HONG KONG	77,567	20%	312,751	80%	390,318
SINGAPORE	94,610	53%	84,094	47%	178,704
CHINA	83,673	81%	19,850	19%	103,523
JAPAN	53,484	90%	6,008	10%	59,492
TAIWAN	9,087	22%	31,810	78%	40,897
IRELAND	38,120	100%	0	0%	38,120
INDONESIA	7,800	25%	22,857	75%	30,657
NETHERLANDS	15,992	100%	0	0%	15,992
ISRAEL	11,118	100%	0	0%	11,118
MALAYSIA	5,525	67%	2,778	33%	8,303
INDIA	0	0%	6,645	100%	6,645
THAILAND	2,879	74%	1,021	26%	3,900
ITALY	0	0%	2,934	100%	2,934
UNITED ARAB EMIRATES	2,540	100%	0	0%	2,540
CAMBODIA	0	0%	1,841	100%	1,841
BAHRAIN	0	0%	635	100%	635
SAINT PIERRE & MIQUELON	0	0%	593	100%	593
SWITZERLAND	0	0%	42	100%	42
GERMANY	0	0%	26	100%	26
FRANCE	26	100%	0	0%	26
FRESH TOTAL:	57,084,914	82%	12,734,578	18%	69,819,492

Note: Fresh exports excluding the United States total 896,306 pounds of which Highbush accounts for 45% of the total (402,421 pounds) and Lowbush accounts for 55% of the total (493,885 pounds).

Source: Statistics, CATSNET Analytics Canada "Canadian Domestic Exports of Blueberries"

**2018 CANADIAN FROZEN BLUEBERRY EXPORTS
HIGHBUSH VERSUS LOWBUSH
(POUNDS)**

FROZEN EXPORTS:

COUNTRY	HIGHBUSH POUNDS	HIGHBUSH % OF TOTAL EXPORT	LOWBUSH POUNDS	LOWBUSH % OF TOTAL EXPORT	2018 TOTAL
UNITED STATES	53,303,809	47%	60,523,558	53%	113,827,367
GERMANY	0	0%	31,678,984	100%	31,678,984
JAPAN	4,666,856	20%	18,681,732	80%	23,348,588
POLAND	456,352	4%	12,401,794	96%	12,858,146
CHINA	705,878	6%	10,227,210	94%	10,933,088
BELGIUM	0	0%	9,495,064	100%	9,495,064
NETHERLANDS		0%	9,352,456	100%	9,352,456
SWITZERLAND	0	0%	6,706,459	100%	6,706,459
FRANCE	1,078	0%	5,328,827	100%	5,329,905
UNITED KINGDOM	68,991	2%	3,842,027	98%	3,911,018
ITALY	0	0%	2,733,424	100%	2,733,424
AUSTRALIA	243,216	9%	2,389,332	91%	2,632,548
AUSTRIA	0	0%	2,037,172	100%	2,037,172
SERBIA	0	0%	1,468,283	100%	1,468,283
NEW ZEALAND	971,814	73%	359,619	27%	1,331,433
SWEDEN	0	0%	936,175	100%	936,175
CZECH REPUBLIC	0	0%	930,917	100%	930,917
*PHILIPPINES	0	0%	777,298	100%	777,298
TAIWAN	85,186	11%	678,157	89%	763,343
NORWAY	0	0%	574,819	100%	574,819
DENMARK	0	0%	495,444	100%	495,444
BULGARIA	0	0%	455,122	100%	455,122
SOUTH KOREA	55,571	12%	396,819	88%	452,390
PORTUGAL	0	0%	410,691	100%	410,691
UKRAINE	0	0%	305,734	100%	305,734
CHILE	144,022	50%	143,987	50%	288,009
VIETNAM		0%	254,431	100%	254,431
REPUBLIC OF IRELAND	0	0%	206,895	100%	206,895
MALAYSIA	69,284	40%	104,939	60%	174,223
BRAZIL	0	0%	157,510	100%	157,510
SWAZILAND	0	0%	157,408	100%	157,408
TURKEY	0	0%	154,346	100%	154,346
ISRAEL	0	0%	152,261	100%	152,261
THAILAND	78,720	75%	26,455	25%	105,175
INDONESIA	68,658	68%	32,099	32%	100,757
MONTENEGRO	0	0%	96,958	100%	96,958
INDIA	35,128	41%	50,999	59%	86,127
SOUTH AFRICA	0	0%	50,999	100%	50,999
ROMANIA	0	0%	50,999	100%	50,999
BOSNIA & HERZEGOVINA	0	0%	47,972	100%	47,972
SINGAPORE	0	0%	44,998	100%	44,998
LATVIA	0	0%	40,946	100%	40,946
HONG KONG	0	0%	22,500	100%	22,500
SAINT PIERRE & MIQUELON	622	100%		0%	622
FROZEN TOTAL:	60,955,185	25%	184,983,819	75%	245,939,004

Note: Frozen exports excluding shipments to the United States total 132,111,637 pounds of which Highbush represents 6% of shipments (7,651,376 pounds) and Lowbush represents 94% of shipments (124,460,261 pounds).

Source: Statistics, CATSNET Analytics Canada "Canadian Domestic Exports of Blueberries"

**NORTH AMERICAN BLUEBERRY OFFSHORE EXPORT
2009-2018
(000 POUNDS)**

YEAR	NORTH AMERICAN TOTAL PRODUCTION	OFFSHORE EXPORT*	OFFSHORE EXPORT AS % OF PRODUCTION
2009	685,026	71,948	11%
#2010	688,130	92,749	13%
2011	760,280	115,520	15%
2012	841,258	116,461	14%
2013	874,072	102,199	12%
2014	1,062,880	111,082	10%
2015	1,094,665	124,396	11%
2016	1,164,196	119,907	13%
^2017	996,060	152,612	15%
2018	1,016,000	163,178	16%
Ten Year Average 2009-2018	918,257	117,005	13%

The ten year average (2009-2018) for offshore export is 13% of the average of blueberry production from 2009 to 2018

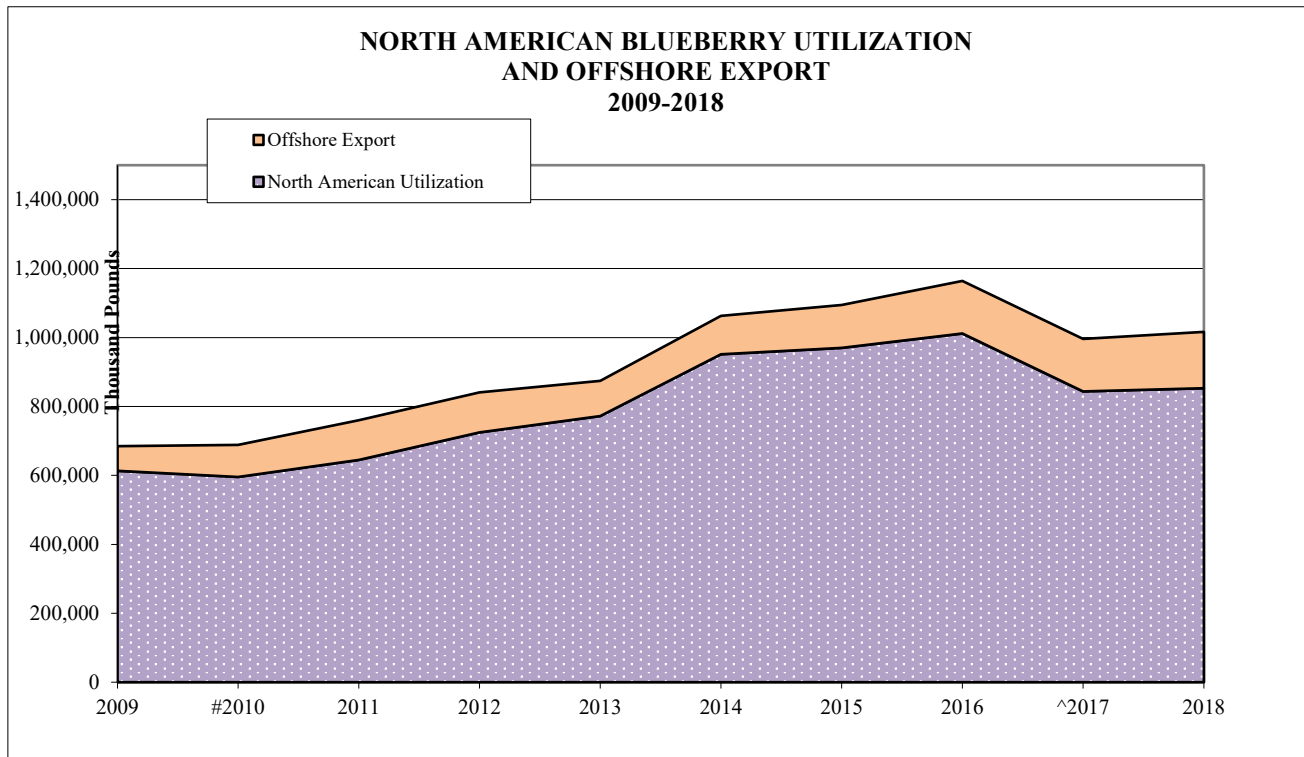
North American offshore exports in 2018 total 163,178,247 pounds of which 8,775,077 pounds (5%) were fresh blueberries and 154,403,169 pounds (95%) were frozen blueberries.

*Exports calendar year, fresh and process (excluding U.S. and Canada).

^Revised data per USDA/NASS "Non-citrus Fruit & Nuts Summary" - June 2019

Includes Mexico data from 2010 to date.

Data from area Repts and World Blueberry Statistics & Global Market Analysis.



**NORTH AMERICAN PROCESSED BLUEBERRY CONSUMPTION, ESTIMATED INVENTORY, PRODUCTION, FROZEN MARKET
1988-2019 (000,000 Pounds)**

YEAR	JULY 1				FROZEN				PROCESSED		DOMESTIC	HIGHBUSH	LOWBUSH						
	FROZEN CARRY-IN*	+	PRODUCTION	=	TOTAL SUPPLY	FRESH PRODUCTION	=	PROCESSED AVAILABLE	-	FROZEN CARRY-OUT JUNE 30*	=	PROCESSED CONSUMPTION	OFFSHORE EXPORT	=	PROCESSED CONSUMPTION	FROZEN MARKET**	FROZEN MARKET**		
1988/89	17.5	+	231.4	=	248.9	-	54.2	=	194.7	-	26.8	=	167.9	-	40.2	=	127.7	1.05-0.86	.98-1.00
1989/90	26.8	+	220.9	=	247.7	-	63.8	=	183.9	-	34.8	=	149.1	-	25.0	=	124.1	0.85-0.61	1.01-1.12
1990/91	34.8	+	267.5	=	302.3	-	65.4	=	236.9	-	33.2	=	203.7	-	56.6	=	147.1	0.57-0.71	1.10-0.95
1991/92	33.2	+	243.3	=	276.5	-	62.4	=	214.1	-	41.7	=	172.4	-	58.8	=	113.6	0.74-0.86	.97-1.05
1992/93	41.7	+	281.7	=	323.4	-	55.5	=	267.9	-	47.1	=	220.8	-	40.7	=	180.1	0.92-0.77	0.99-0.85
1993/94	47.1	+	319.8	=	366.9	-	77.4	=	289.5	-	58.8	=	230.7	-	44.6	=	186.1	0.62-0.51	0.85-0.75
1994/95	58.8	+	285.5	=	344.3	-	81.6	=	262.7	-	43.6	=	219.1	-	44.9	=	174.2	0.51-0.59	0.75-0.79
1995/96	43.6	+	321.9	=	365.5	-	90.0	=	275.5	-	31.7	=	243.8	-	50.9	=	192.9	0.48-0.83	0.79-0.88
1996/97	31.7	+	297.1	=	328.8	-	77.3	=	251.5	-	29.3	=	222.2	-	47.6	=	174.6	0.99-1.01	1.00-0.94
1997/98	29.3	+	333.3	=	362.6	-	85.5	=	277.1	-	63.4	=	213.7	-	46.6	=	167.1	0.97-0.63	0.94-0.87
1998/99	63.4	+	288.8	=	352.2	-	94.4	=	257.8	-	33.8	=	224.0	-	57.4	=	166.6	0.60-0.92	0.87-1.50
1999/00	33.8	+	390.0	=	423.8	-	91.8	=	332.0	-	31.4	=	300.6	-	58.2	=	242.4	0.88-1.00	0.50-1.15
2000/01	31.4	+	432.5	=	463.9	-	104.6	=	359.3	-	59.2	=	300.1	-	60.1	=	240.0	0.99-0.83	1.15-0.94
2001/02	59.2	+	418.2	=	477.4	-	112.3	=	365.1	-	69.0	=	296.1	-	56.9	=	239.2	0.78-0.76	0.94-0.68
2002/03	69.0	+	400.4	=	469.4	-	128.6	=	340.8	-	39.6	=	301.2	-	59.5	=	241.7	0.76-1.09	0.78-0.90
2003/04	39.6	+	449.9	=	489.5	-	138.1	=	351.4	-	45.4	=	306.0	-	66.1	=	239.9	1.04-1.07	0.90-1.05
2004/05	45.4	+	469.1	=	514.5	-	165.7	=	348.8	-	37.6	=	311.2	-	81.2	=	230.0	1.08-1.18	1.08-1.43
2005/06	37.6	+	462.0	=	499.6	-	162.2	=	337.4	-	35.7	=	301.7	-	74.1	=	227.6	1.13-1.93	1.43-N/A
2006/07	35.7	+	543.7	=	579.4	-	169.9	=	409.5	-	50.3	=	359.2	-	78.3	=	280.9	1.75-2.10	N/A
2007/08	50.3	+	539.0	=	589.3	-	173.4	=	415.9	-	69.3	=	346.6	-	69.1	=	277.5	2.10-1.32	N/A
2008/09	69.3	+	655.2	=	724.5	-	231.9	=	492.6	-	108.5	=	384.1	-	69.2	=	314.9	1.15-0.66	N/A - 1.10
2009/10	108.5	+	685.0	=	793.5	-	282.9	=	510.6	-	76.4	=	434.2	-	65.2	=	369.0	0.65-1.09	1.10 - 1.13
2010/11	76.4	+	688.1	=	764.5	-	299.6	=	464.9	-	76.6	=	388.3	-	84.3	=	304.0	1.09-1.55	1.13 - 1.86
2011/12	76.6	+	760.3	=	836.9	-	331.1	=	505.8	-	109.6	=	396.2	-	105.1	=	291.1	1.68-1.48	1.86-2.00
2012/13	109.6	+	841.3	=	950.9	-	340.0	=	610.9	-	138.1	=	472.8	-	106.1	=	366.7	1.35-1.13	2.00-1.70
2013/14	138.1	+	874.1	=	1,012.2	-	358.8	=	653.4	-	136.0	=	517.4	-	97.2	=	420.2	1.13-95	1.70-175
2014/15	136.0	+	1,062.9	=	1,198.9	-	413.2	=	785.7	-	177.0	=	608.7	-	100.8	=	507.9	.95-1.05	1.75-NA
2015/16	177.0	+	1,093.7	=	1,270.7	-	390.6	=	880.1	-	210.6	=	669.5	-	114.1	=	555.4	1.20-1.07	N/A
2016/17	210.6	+	1,171.8	=	1,382.4	-	414.8	=	967.6	-	197.2	=	770.4	-	111.7	=	658.7	1.03-.90	N/A
^2017/18	197.2	+	967.8	=	1,165.0	-	486.5	=	678.5	-	133.2	=	545.3	-	142.3	=	403.0	.90-1.10	N/A
2018/19	133.2	+	996.1	=	1,129.3	-	580.6	=	548.7	-	124.6	=	424.1	-	154.4	=	269.7	.875-1.1	N/A

2018/19 vs. 2017/18:

-32.5%	2.9%	-3.1%	+19.3%	-19.1%	-6.5%	-22.2%	+8.5%	-33.1%
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5 Year Average 2014/15-2018/19:

170.8	+	1,058.5	=	1,229.3	-	457.1	=	772.1	-	168.5	=	603.6	-	124.7	=	478.9
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Total Domestic Process Consumption has averaged 476,427,300 pounds for the past 5 years. Total 2018 Process Consumption (Domestic & Export): 411,600,000 pounds. Total 2018 Production: 996,100,000 pounds (includes Mexico). Estimated decrease in carry over inventory 6/30/19 versus 6/30/18 of 8,600,000 pounds.

* Beginning with 1995/96 crop year, figures are estimates based on actual U.S. cold storage inventory figure and estimate of Canadian total based upon historic percentages.

**Average July price versus average June price (following year) for Michigan (highbush) and Maine (lowbush) as reported by Food Institute Report, estimates for months when data not available.

Note: Food Institute did not report lowbush from January 2006 through 2008 or 2016 through 2018

^2017 data revised per USDA/NASS "Non-citrus Fruit & Nuts Summary" - June 2019 and Stats Canada - May 2019

TOTAL NORTH AMERICAN CONSUMPTION
1990-2018
(1,000's Pounds)

	Total Fresh Production	Fresh Offshore Exports	Fresh Offshore Imports	Domestic Fresh Consumption	Domestic Process Consumption	Process Offshore Imports	Total North American Consumption	North American Per Capita Consumption (POUNDS)						
1990	65,400	-	17	+	664	=	66,047	+	147,100	+	60	=	213,207	0.77
1991	62,400	-	1,432	+	707	=	61,675	+	113,600	+	3	=	175,278	0.63
1992	55,502	-	1,474	+	701	=	54,729	+	180,100	+	18	=	234,847	0.83
1993	77,367	-	1,540	+	1,112	=	76,939	+	186,100	+	11	=	263,050	0.92
1994	81,644	-	1,764	+	1,011	=	80,891	+	174,200	+	32	=	255,123	0.88
1995	90,000	-	2,201	+	2,048	=	89,847	+	192,900	+	27	=	282,774	0.97
1996	77,310	-	2,583	+	2,603	=	77,330	+	174,600	+	133	=	252,063	0.85
1997	85,549	-	2,107	+	3,192	=	86,634	+	167,100	+	419	=	254,153	0.85
1998	94,363	-	2,881	+	4,257	=	95,739	+	166,600	+	637	=	262,976	0.88
1999	91,831	-	3,649	+	5,739	=	93,921	+	242,400	+	549	=	336,870	1.11
2000	104,630	-	3,541	+	8,107	=	109,196	+	240,000	+	530	=	349,726	1.12
2001	112,300	-	3,058	+	10,150	=	119,392	+	239,200	+	490	=	359,082	1.14
2002	128,600	-	3,974	+	14,471	=	139,097	+	241,700	+	663	=	381,460	1.20
2003	138,100	-	3,049	+	14,316	=	149,367	+	239,900	+	1,259	=	390,526	1.21
2004	165,700	-	3,317	+	25,952	=	188,335	+	230,000	+	921	=	419,256	1.29
2005	162,200	-	6,367	+	28,780	=	184,613	+	227,600	+	2,478	=	414,691	1.26
2006	169,900	-	5,979	+	43,100	=	207,021	+	280,900	+	5,008	=	492,929	1.49
2007	173,400	-	4,428	+	58,072	=	227,044	+	277,500	+	6,539	=	511,083	1.53
2008	231,860	-	5,154	+	91,521	=	318,227	+	314,900	+	12,264	=	645,391	1.91
2009	282,927	-	6,704	+	105,434	=	381,657	+	369,000	+	12,190	=	762,847	2.24
2010	299,641	-	8,496	+	145,186	=	436,331	+	299,000	+	13,865	=	749,196	2.18
2011	331,095	-	10,439	+	180,650	=	501,306	+	282,300	+	45,633	=	829,239	2.40
2012	340,415	-	10,344	+	122,624	=	452,695	+	354,100	+	36,036	=	842,831	2.42
2013	353,176	-	11,111	+	188,799	=	530,864	+	401,000	+	40,474	=	972,338	2.77
2014#	413,213	-	9,986	+	157,885	=	561,112	+	505,900	+	33,185	=	1,100,197	3.14
2015	390,368	-	10,276	+	201,211	=	581,303	+	551,600	+	37,140	=	1,170,043	3.21
2016	414,795	-	8,182	+	298,119	=	704,732	+	651,028	+	44,664	=	1,400,424	3.39
2017*	486,500	-	10,859	+	280,965	=	756,606	+	403,000	+	38,721	=	1,198,327	3.57
2018	580,598	-	8,775	+	352,460	=	924,283	+	269,662	+	49,311	=	1,243,256	3.40

NORTH AMERICAN POPULATION 1990 to 2016 (millions)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Canada	27.8	28.1	28.5	28.9	29.3	29.6	29.7	30.0	30.2	30.5	30.8	31.1
USA	249.5	252.2	255.0	257.8	260.3	262.8	265.2	267.8	270.2	272.7	281.4	284.8
North American Total:	277.3	280.3	283.5	286.7	289.6	292.4	294.9	297.8	300.4	303.2	312.2	315.9

YEAR	2002	2003	2004	2005	2006	2007	2008	2009	#	2011	2012	2013	2014
Canada	31.3	31.6	31.9	32.2	32.6	32.9	33.3	33.7	#	34.5	34.9	35.3	35.5
USA	287.4	291.5	293.6	296.5	299.1	302.2	304.5	306.8	#	311.7	313.9	316.2	317.7
North American Total:	318.7	323.1	325.5	328.7	331.7	335.1	337.8	340.5	#	346.2	348.8	351.5	353.2

YEAR	2015	2016	2017	2018
Canada	35.8	36.2	36.7	37.2
USA	321.2	323.9	325.4	328
North American Total:	357.0	360.1	362.1	365.2

Source: Population Reference Bureau (www.prb.org) #Includes Mexico as of 2014

*Data revised per USDA/NASS "Non-citrus Fruit & Nuts Summary" and Stats Canada - July 2019

**U.S. BLUEBERRY UTILIZATION - HIGHBUSH AND LOWBUSH
2014/15 TO 2018/19
(Millions of Pounds)**

CROP YEAR PROJECTION

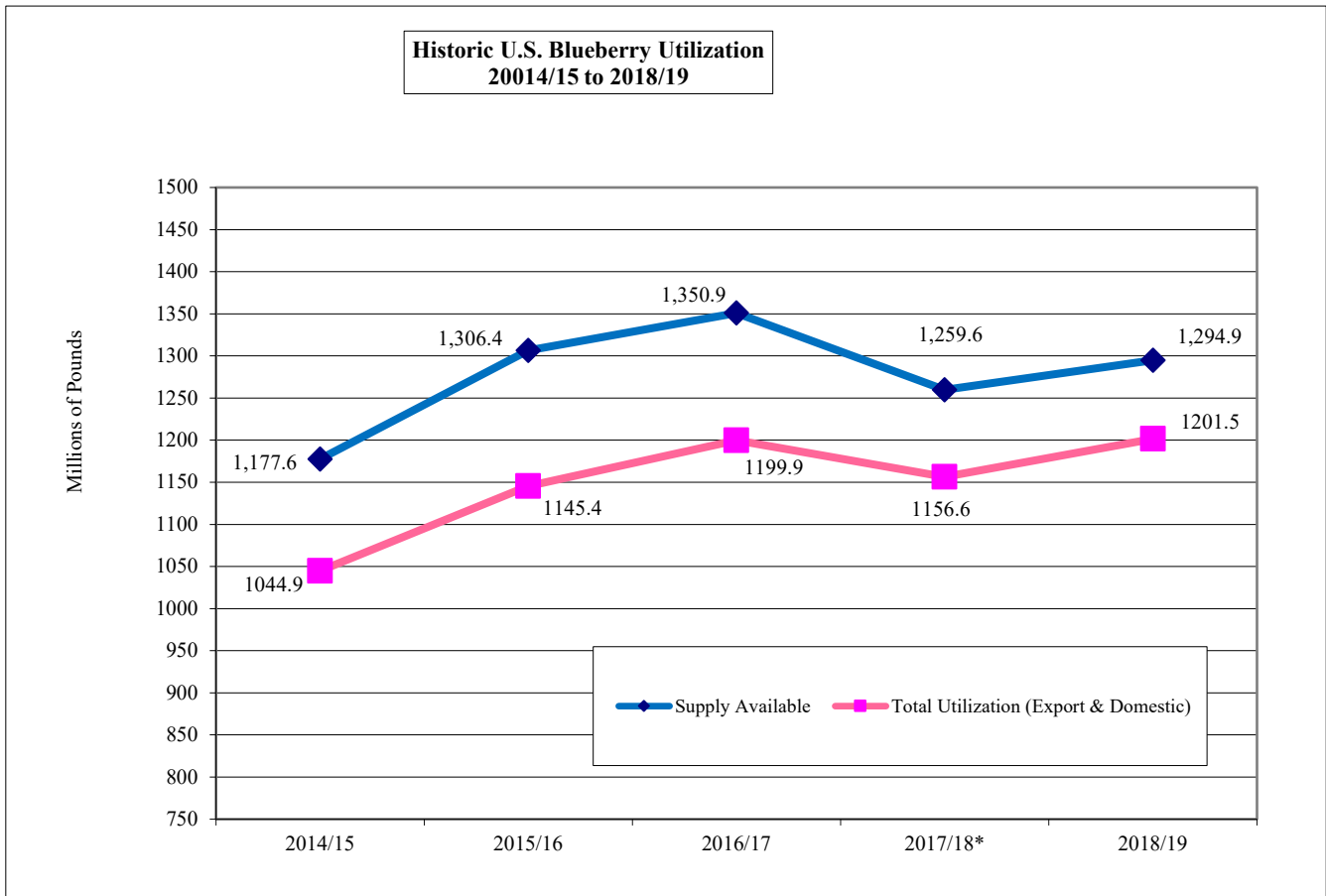
	2014/15	2015/16	2016/17	2017/18	2018/19
July 1st Frozen Carry In	102.0	132.7	161.0	151.0	103.0
+ Frozen Imports (7/1 to 6/30)	137.8	161.4	159.2	155.0	184.4
+ Fresh Imports (7/1 to 6/30)	262.8	297.5	331.7	356.7	407.5
+ US Production	675.0	714.8	699.0	596.9	600.0
= Supply Available	1,177.6	1,306.4	1,350.9	1,259.6	1,294.9
- Fresh Domestic Consumption (7/1 to 6/30) ^{1/}	506.0	529.2	640.1	672.7	806.4
- Frozen Domestic Consumption (7/1 to 6/30)	484.4	566.4	506.1	430.2	355.0
- Frozen Exports (7/1 to 6/30)	54.5	49.8	53.7	53.7	40.1
= June 30th Frozen Carry Out	132.7	161.0	151.0	103.0	93.4

* Numbers revised per USDA/ERS

Exports include shipments to Canada, Imports include shipments from Canada

^{1/} Fresh domestic consumption = total U.S. fresh production + fresh imports - fresh exports.

^ Includes Organic



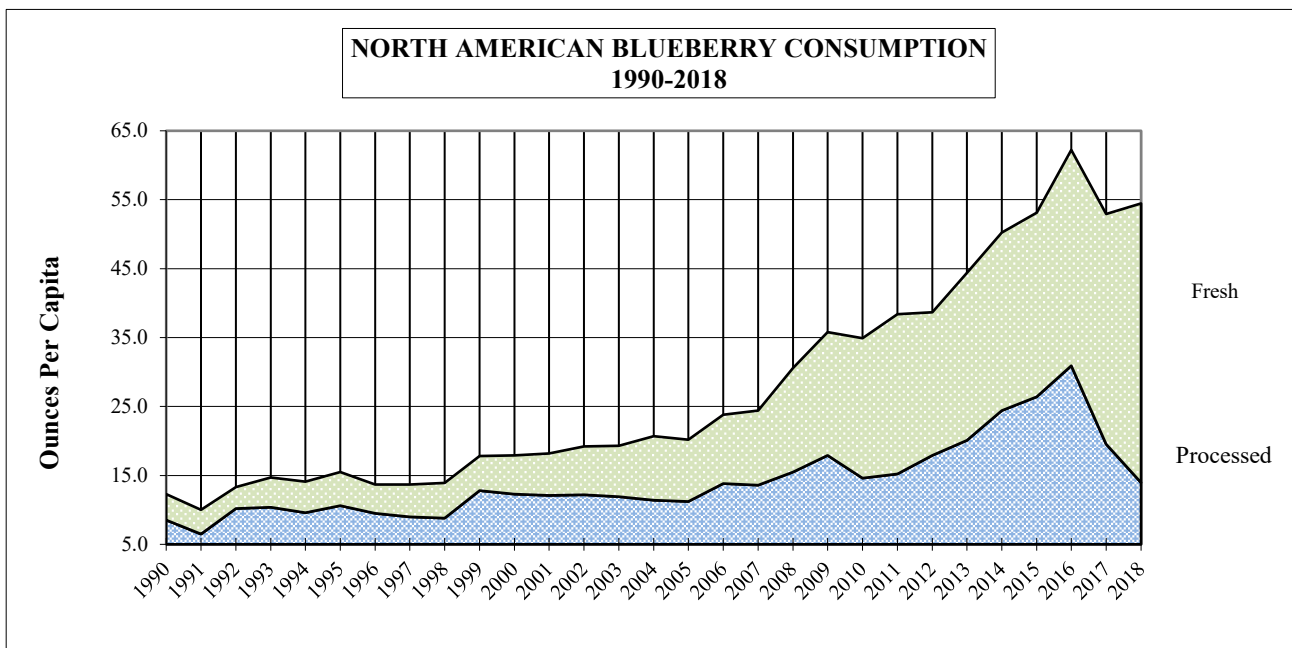
NORTH AMERICAN BLUEBERRY CONSUMPTION

1990-2018

DOMESTIC PER CAPITA CONSUMPTION OF FRESH & PROCESSED BLUEBERRIES

(Includes Offshore Imports)

YEAR	FRESH BLUEBERRIES		PROCESSED BLUEBERRIES		TOTAL CONSUMPTION	
	POUNDS	OUNCES	POUNDS	OUNCES	POUNDS	OUNCES
1990	0.238	3.8	0.531	8.5	0.769	12.3
1991	0.220	3.5	0.405	6.5	0.625	10.0
1992	0.193	3.1	0.635	10.2	0.828	13.3
1993	0.268	4.3	0.649	10.4	0.917	14.7
1994	0.280	4.5	0.602	9.6	0.882	14.1
1995	0.308	4.9	0.660	10.6	0.968	15.5
1996	0.262	4.2	0.593	9.5	0.855	13.7
1997	0.291	4.7	0.563	9.0	0.854	13.7
1998	0.319	5.1	0.553	8.8	0.872	13.9
1999	0.310	5.0	0.801	12.8	1.111	17.8
2000	0.350	5.6	0.771	12.3	1.121	17.9
2001	0.378	6.1	0.759	12.1	1.137	18.2
2002	0.437	7.0	0.761	12.2	1.198	19.2
2003	0.462	7.4	0.746	11.9	1.208	19.3
2004	0.579	9.3	0.709	11.4	1.288	20.7
2005	0.562	9.0	0.700	11.2	1.262	20.2
2006	0.624	10.0	0.862	13.8	1.486	23.8
2007	0.678	10.8	0.848	13.6	1.526	24.4
2008	0.942	15.1	0.969	15.5	1.911	30.6
2009	1.121	17.9	1.120	17.9	2.241	35.8
2010	1.270	20.3	0.910	14.6	2.180	34.9
2011	1.448	23.2	0.947	15.2	2.395	38.4
2012	1.297	20.8	1.119	17.9	2.416	38.7
2013	1.526	24.3	1.327	20.1	2.853	44.4
2014	1.613	25.8	1.526	24.4	3.139	50.2
2015	1.671	26.7	1.649	26.4	3.320	53.1
2016	1.957	31.3	1.932	30.9	3.889	62.2
2017	2.089	33.4	1.220	19.5	3.309	53.0
2018	2.531	40.5	0.873	14.0	3.404	54.5

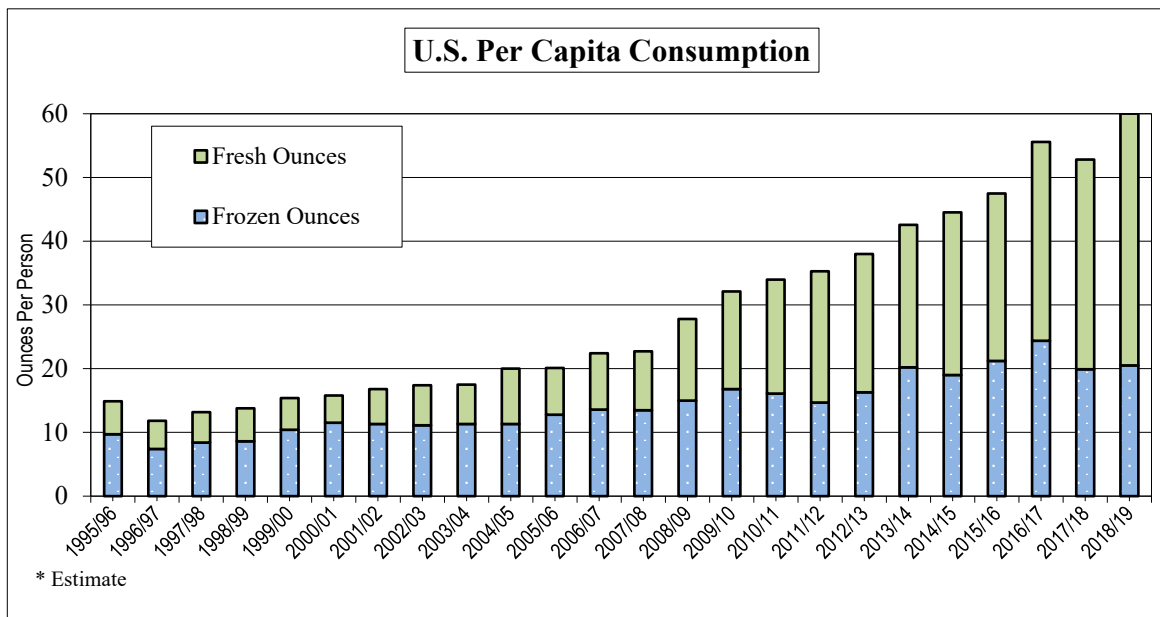


U.S. PER CAPITA CONSUMPTION 1995/96 TO 2018/19

Crop Year	<u>FRESH BLUEBERRIES</u>		<u>PROCESSED BLUEBERRIES ^</u>		<u>TOTAL CONSUMPTION</u>	
	Fresh Pounds	Fresh Ounces	Frozen Pounds	Frozen Ounces	Pounds	Ounces
1995/96	0.325	5.2	0.606	9.7	0.931	14.9
1996/97	0.274	4.4	0.463	7.4	0.737	11.8
1997/98	0.300	4.8	0.523	8.4	0.823	13.2
1998/99	0.326	5.2	0.534	8.6	0.860	13.8
1999/00	0.313	5.0	0.651	10.4	0.964	15.4
2000/01	0.266	4.3	0.719	11.5	0.985	15.8
2001/02	0.346	5.5	0.703	11.3	1.049	16.8
2002/03	0.394	6.3	0.691	11.1	1.085	17.4
2003/04	0.390	6.2	0.709	11.3	1.099	17.5
2004/05	0.542	8.7	0.707	11.3	1.249	20.0
2005/06	0.454	7.3	0.800	12.8	1.254	20.1
2006/07	0.552	8.8	0.850	13.6	1.402	22.4
2007/08	0.574	9.2	0.846	13.5	1.420	22.7
2008/09	0.802	12.8	0.936	15.0	1.738	27.8
2009/10	0.959	15.3	1.051	16.8	2.010	32.1
2010/11	1.119	17.9	1.009	16.1	2.128	34.0
2011/12	1.288	20.6	0.917	14.7	2.205	35.3
2012/13	1.355	21.7	1.021	16.3	2.376	38.0
2013/14	1.399	22.4	1.259	20.2	2.659	42.6
2014/15	1.594	25.5	1.189	19.0	2.783	44.5
2015/16	1.641	26.3	1.326	21.2	2.968	47.5
2016/17	1.950	31.2	1.527	24.4	3.477	55.6
2017/18	2.055	32.9	1.245	19.9	3.300	52.8
2018/19	2.471	39.5	1.281	20.5	3.751	60.0

(Crop Year = July 1 to June 30)

^Highbush & Lowbush



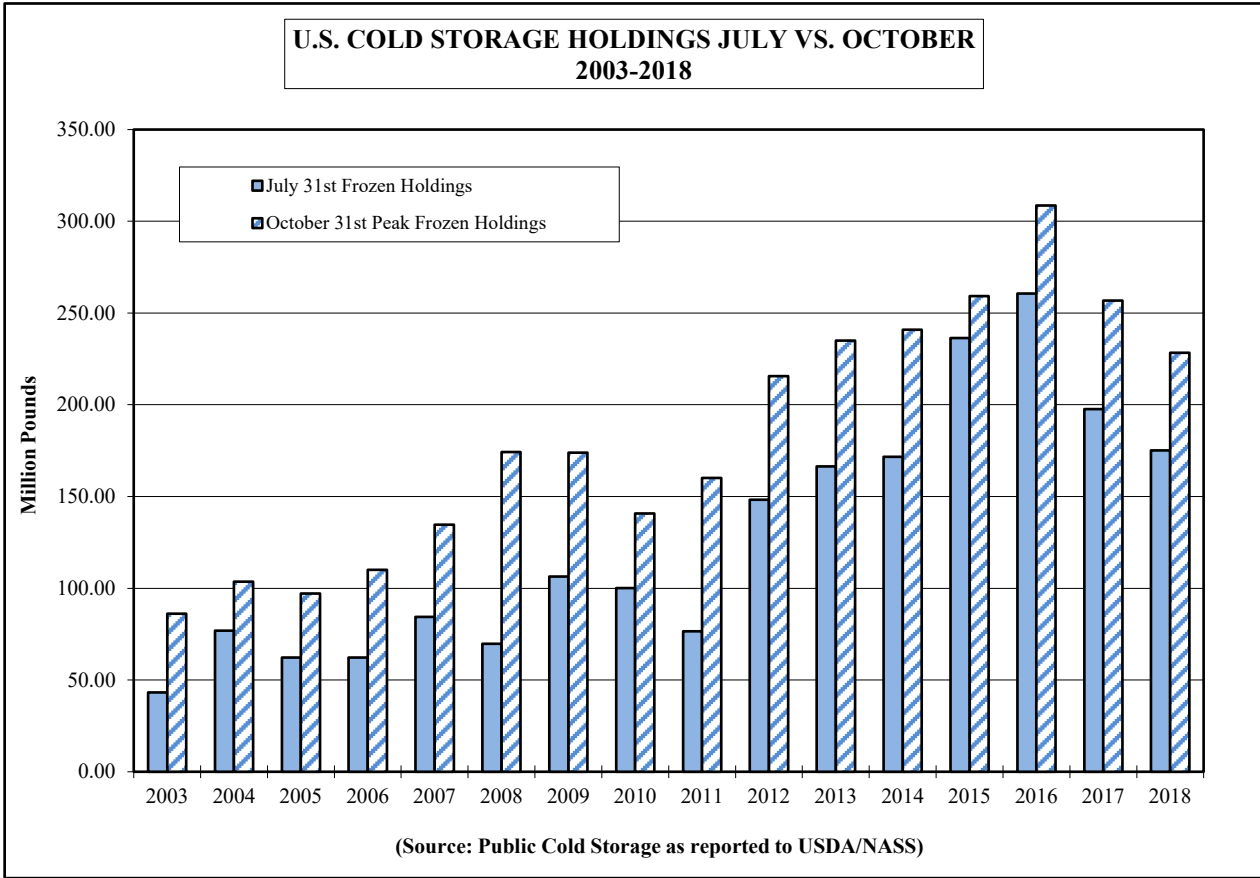
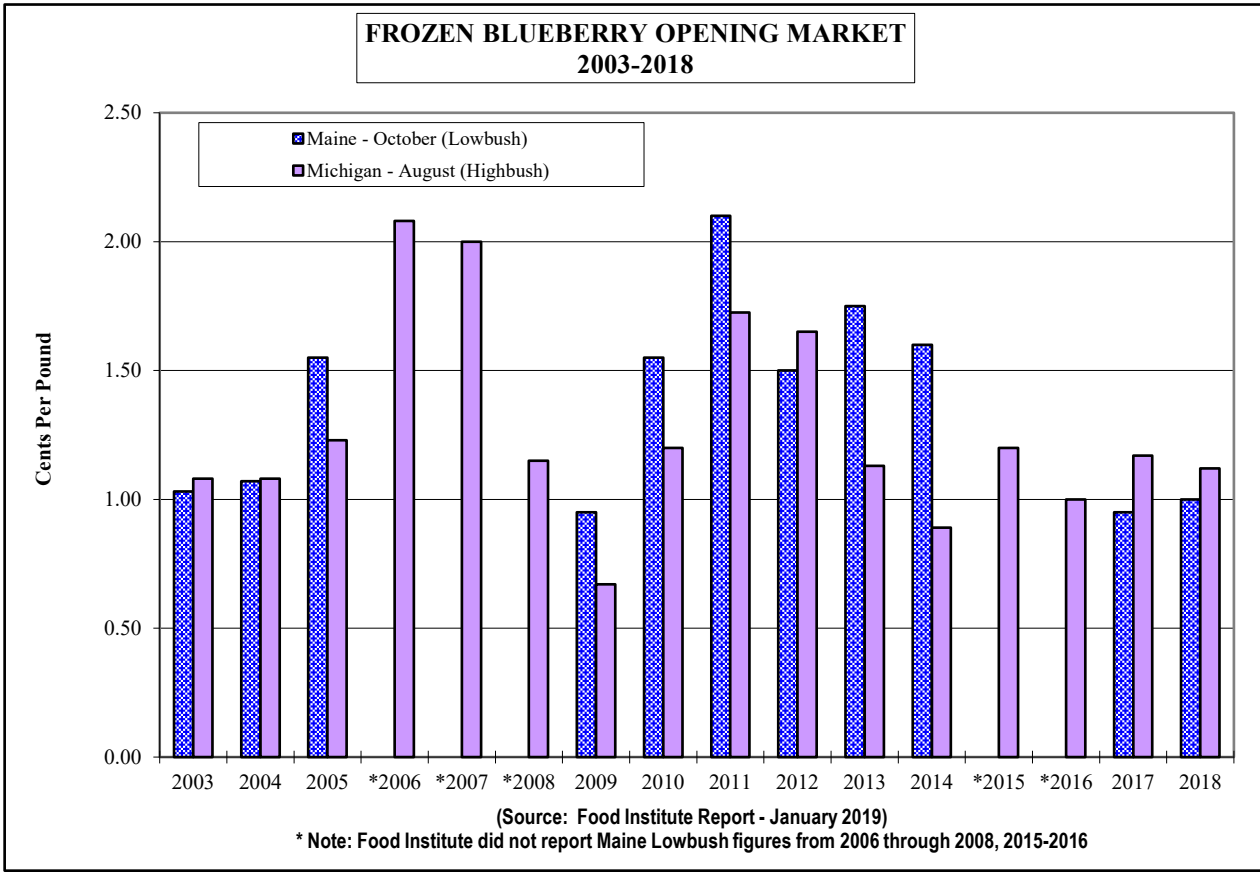
PRICE TRENDS FROZEN BLUEBERRIES
1992-2018
CENTS PER POUND - F.O.B. PRICES - 30 POUND CARTONS

		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1992	Michigan	80-82	80-82	80-82	80-82	82-84	85-88	90-95	95-105	92-96	92-95	88-93	86-90
	Maine	103-108	103-108	103-108	103-108	103-108	103-108	98-100	93-96	92-94	92-95	90-95	90-93
1993	Michigan	82-85	84-88	84-88	84-88	82	75-79	60-64	55-60	48-54	50-54	50-54	50-54
	Maine	90-92	88-90	87-89	87-89	87-89	85	85	79	75	72-75	70-73	68-72
1994	Michigan	50-54	50-54	50-52	50-52	50-52	50-52	50-52	58-60	58	59	60	60
	Maine	69	69	69	75	75	75	75	*	76-78	78	79-81	79-81
1995	Michigan	60	60	60	58-60	58-60	58-60	48	50	55-58	58-60	64-65	67-70
	Maine	78-80	78-80	78-80	78-80	78-80	78-80	*	*	78-80	78-80	80-83	80-85
1996	Michigan	68-72	70-72	75	78-80	78-80	80-85	98-99	105-110	105-110	105-108	110-112	110
	Maine	80-85	85	85	85-90	85-90	85-90	*	*	110-115	110-115	115	115-118
1997	Michigan	107-110	110-112	110-112	108	108	*	*	92-95	89-90	80-85	78-80	75-79
	Maine	115-118	115-118	110-114	110-118	110-118	92-95	92-95	98	95-98	90-95	90-92	90-92
1998	Michigan	65-70	61-66	62-68	62-65	60-65	60-65	60	75-79	79	80-82	80-82	85
	Maine	91-93	87-92	87-92	87-92	85-88	85-88	85-88	85-88	110-112	110-112	110-112	115
1999	Michigan	92-97	92-97	92-97	88-92	88-92	88-95	*	85-87	88-90	97-100	97-100	104-110
	Maine	125-140	125-140	125-140	150	150	150	150	*	115-120	115-120	115-120	115-120
2000	Michigan	105-110	105-110	115-120	114-120	*	*	*	95-97	95-97	95-97	95-97	97-98
	Maine	115-120	115-120	120	120	120	*	*	*	106-110	106-110	106-110	106-110
2001	Michigan	*	*	87-89	87-89	87-89	*	77-79	74-76	72-75	72-75	72-75	65-75
	Maine	*	*	90-93	90-93	90-93	*	94-95	*	80-85	*	82-85	*
2002	Michigan	62-68	64-68	64-68	74-78	74-78	75-77	74-78	80-84	80-86	85-88	94-96	85-90
	Maine	90-100	90-100	80-94	68	*	68	*	*	87-90	65-83	78-82	75-78
2003	Michigan	85-90	110-115	110-115	110-115	110-115	106-112	100-108	105-110	100-110	110-115	112-115	100-115
	Maine	75-78	84-88	84-88	84-88	85-90	85-95	85-95	95-100	95-100	95-110	100-110	100-110
2004	Michigan	110-115	110-115	110-115	*	115-120	*	*	105-110	112-115	110-115	112-115	112-115
	Maine	100-110	100-110	103-105	103-105	100-110	*	*	105-110	105	107	107	107
2005	Michigan	115-116	117-118	117-122	120-125	120-125	*	110-115	120-125	130-150	160-175	173-176	185-190
	Maine	*	125-135	140-145	140-145	140-145	*	*	*	142-145	150-160	*	*
**2006	Michigan	195-205	205-215	205-215	*	*	*	170-180	200-215	205-215	210-215	215-220	220-225
**2007	Michigan	220-225	220-225	220-225	210	210	210	210	200	200	179-200	176-185	175-182
**2008	Michigan	165	165	168	159	145	132	115	115	120	110	95	93
2009	Michigan	85	79	65	65	63	66	65	67	68	69	70	70
	Maine	150	150	150	*	*	*	110	110	95	95	*	*
2010	Michigan	72	75	92	100	97	*	*	120	165	*	*	*
	Maine	*	*	*	85	85	*	*	140	155	155	160	160
2011	Michigan	170-180	*	170-180	150-160	150-160	150-160	165-170	170-175	200-205	200-210	175-185	175-185
	Maine	*	*	165-170	*	*	*	*	*	205	210	209-215	209-215
2012	Michigan	165-175	165-175	160-165	160-165	*	145-150	120-150	160-170	140-150	145	145	145
	Maine	*	*	200	200	*	200	*	140	130-140	125-175	125-175	125-175
2013	Michigan	*	*	*	100-125	110-115	110-115	110-115	110-115	105-120	105-120	105-120	105-120
	Maine	120-125	120-125	165-175	165-175	165-175	165-175	165-175	160-165	175	175	175	175
2014	Michigan	105-120	98-110	95	95	95	95	95	89	110-120	110-120	*	*
	Maine	175	175	175	175	175	175	175	191	160	160	*	*
2015	Michigan	*	110-125	110-120	110-120	105-110	100-110	110-130	115-125	115-125	115-125	115-125	115-125
	Maine	*	*	*	*	*	*	*	*	*	*	*	*
2016	Michigan	115-125	*	115-125	115-125	115-125	105-112	100-105	95-105	95-105	95-105	95-105	95-105
	Maine	130	*	*	*	*	*	*	*	*	*	*	*
^2017	Michigan	.85-.90	.85-.90	.85-.90	.85-.90	.85-.90	.85-.90	.85-.90	110-125	105-125	105-120	105-120	105-120
	Maine	0.88	0.89	0.90	0.90	0.90	0.90	0.90	*	0.95	0.95	0.95	0.95
2018	Michigan	.95-1.10	.95-1.10	.95-1.15	1.00-1.15	.95-1.15	1.05-1.15	1.10-1.20	1.10-1.15	.95-1.10	1.00-1.15	1.00-1.15	1.00-1.15
	Maine	*	*	*	*	*	*	*	*	1.00	1.00	1.00	1.00

Source: Food Institute Report, January 2019, "Price Trends of Frozen Fruits Blueberries"

* = No prices quoted **Note: Food Institute did not report Maine figures from 2006 through 2008

^ Revised with Food Institute Report, January 2019, "Price Trends of Frozen Fruits Blueberries"

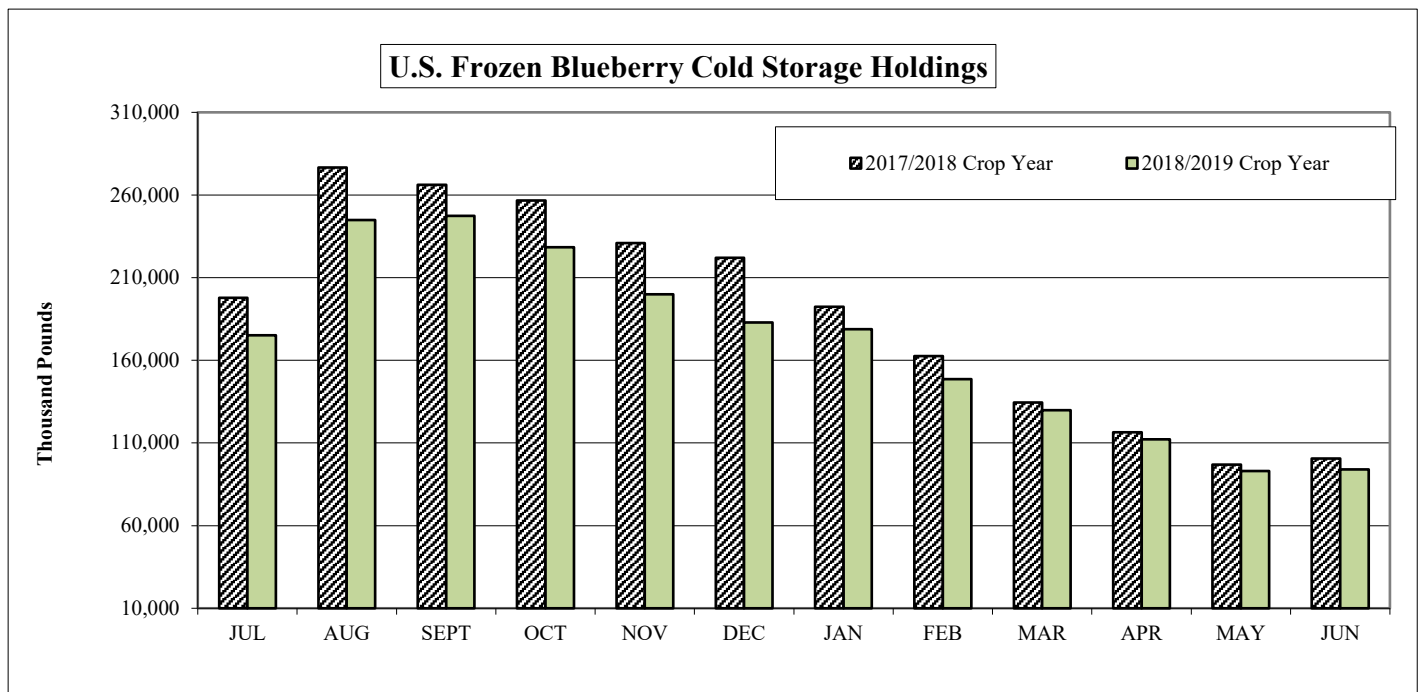


UNITED STATES FROZEN BLUEBERRY COLD STORAGE HOLDINGS
1990-2018 CROP YEAR / (000 POUNDS)

	<i>JULY</i>	<i>AUG</i>	<i>SEPT</i>	<i>OCT</i>	<i>NOV</i>	<i>DEC</i>		<i>JAN</i>	<i>FEB</i>	<i>MAR</i>	<i>APR</i>	<i>MAY</i>	<i>JUNE</i>
1990	30,923	93,617	101,627	90,636	80,183	73,332	1991	64,705	57,109	50,344	42,313	32,741	28,590
1991	42,608	87,158	86,874	83,623	75,499	66,056	1992	60,711	53,794	43,966	37,559	31,884	28,679
1992	38,309	70,485	97,148	91,789	86,286	79,603	1993	69,058	60,952	52,011	45,550	38,605	30,266
1993	34,798	107,595	115,614	105,609	97,882	91,786	1994	88,817	77,475	68,310	56,631	48,652	41,407
1994	51,592	116,209	112,217	93,695	84,830	78,307	1995	70,955	61,018	57,130	46,925	39,462	32,192
1995	37,335	95,570	98,555	85,104	81,593	72,813	1996	60,590	55,911	47,192	38,532	29,363	23,786
1996	33,950	81,006	82,105	71,317	66,381	60,126	1997	55,782	47,892	39,023	32,624	25,661	21,968
1997	38,753	94,398	114,948	102,497	96,928	87,345	1998	83,353	74,665	64,026	60,136	51,593	47,537
1998	70,454	102,064	94,197	88,827	77,259	67,443	1999	60,759	52,951	48,402	40,093	28,603	25,358
1999	47,525	103,184	95,381	81,845	69,999	58,981	2000	52,814	44,814	38,794	30,697	24,137	23,584
2000	52,295	109,252	110,199	99,301	93,553	85,105	2001	77,392	68,791	63,218	53,932	46,978	44,407
2001	62,904	128,534	134,814	120,955	111,814	100,526	2002	91,259	84,492	75,051	66,635	56,245	51,746
2002	66,429	120,995	119,604	111,364	100,274	88,705	2003	76,903	65,843	56,836	48,226	35,299	29,733
2003	43,247	104,450	88,912	86,071	84,355	76,834	2004	69,985	63,981	51,158	43,190	37,504	34,073
2004	76,874	113,322	110,057	103,575	93,845	85,109	2005	77,105	68,419	53,737	41,516	34,673	28,198
2005	62,282	111,198	109,229	97,204	88,008	77,360	2006	68,466	58,754	47,039	36,613	28,909	26,785
2006	62,220	123,072	114,351	110,139	99,826	98,719	2007	83,196	75,709	65,398	56,362	45,921	37,700
2007	84,342	154,880	147,570	134,715	125,577	114,114	2008	100,696	94,652	78,106	66,604	58,282	51,960
2008	69,783	172,145	182,478	174,334	164,703	153,445	2009	141,089	130,964	115,615	100,820	87,790	81,404
2009	106,327	189,893	189,628	173,849	154,647	141,883	2010	123,579	109,095	93,342	75,482	61,331	57,332
2010	100,100	163,387	155,105	140,707	129,877	116,485	2011	104,091	93,103	80,016	65,583	50,865	57,467
2011	76,551	167,015	174,805	160,156	147,757	136,966	2012	124,003	114,066	96,723	85,700	73,717	82,218
2012	148,315	238,510	234,207	215,588	196,702	171,296	2013	165,932	152,187	137,358	119,814	100,876	103,599
2013	166,382	260,094	251,279	235,007	217,393	201,834	2014	172,718	150,626	130,825	117,065	98,716	102,012
2014	171,661	269,537	265,303	240,830	229,225	208,324	2015	187,523	166,469	152,745	133,836	119,328	132,732
2015	236,349	273,614	280,085	259,198	245,754	224,696	2016	211,459	191,351	164,927	154,142	145,414	157,928
2016	260,675	315,436	332,379	308,554	294,135	268,895	2017	241,874	223,298	195,417	184,367	157,140	147,914
2017	197,723	276,632	266,243	256,727	230,843	222,060	2018	192,354	162,564	134,469	116,387	96,891	99,912
2018	175,163	244,902	247,396	228,308	199,883	182,857	2019	178,750	148,696	129,739	112,147	92,992	93,422

Figures are from the last day of the month.

Source: Figures from Public Cold Storage reported to the USDA/NASS



**UNITED STATES FROZEN BLUEBERRY MOVEMENT
CROP YEAR 2009/10 TO 2018/19 (TO DATE)
(000,000 POUNDS)**

CROP YEAR PRESENTATION

	<u>JULY</u>	<u>AUG</u>	<u>SEPT</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUNE</u>	<u>TOTAL*</u>
2009/10	+24.9	+83.6	-0.30	-15.8	-19.2	-12.8	-18.3	-14.5	-15.8	-17.9	-14.2	-4.0	-132.8
2010/11	+42.8	+63.3	-8.30	-14.4	-10.8	-13.4	-12.4	-11.0	-13.1	-14.4	-14.7	6.6	-112.5
2011/12	+19.1	+90.5	+7.8	-14.6	-12.4	-10.8	-13.0	-9.9	-17.3	-11	-12	+8.5	-101.0
2012/13	+66.1	+90.2	-4.30	-18.6	-18.9	-25.4	-5.4	-13.7	-14.8	-17.5	-18.9	+2.7	-137.5
2013/14	+62.8	+93.7	-8.80	-16.3	-17.6	-15.6	-29.1	-22.1	-19.8	-13.8	-18.3	+3.3	-161.4
2014/15	+68.6	+97.9	-4.20	-24.5	-11.6	-20.9	-20.8	-21.1	-13.7	-18.9	-14.5	+12.4	-150.2
2015/16	+104.7	+37.3	+6.5	-20.9	-13.4	-21.1	-13.2	-20.1	-26.4	-10.8	-8.7	+13.0	-134.6
2016/17	+102.7	+54.8	+16.9	-23.8	-14.4	-25.2	-27.0	-18.6	-27.9	-11.1	-27.2	-9.2	-175.2
2017/18	+49.8	+78.9	+10.2	-9.7	-25.9	-8.8	-29.7	-29.8	-28.1	-18.1	-19.5	+3.0	-169.6
2018/19	+75.3	+69.7	+2.5	-19.1	-28.3	-17.1	-4.1	-30.1	-19.0	-17.6	-19.2	+0.4 **	-154.5

10 Year Average (2009/10 - 2018/19)

61.7	76.0	1.8	-17.8	-17.3	-17.1	-17.3	-19.1	-19.6	-15.1	-16.4	5.1	-142.9
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3 Year Average (20016/17 to 2018/19)

75.9	67.8	9.9	-17.5	-22.9	-17.0	-20.3	-26.2	-25.0	-15.6	-22.0	1.7	-166.4
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Figures are from the last day of the month.

*Total Seasonal Consumption = Total of consumption (-) figures for the season.

** Preliminary number

Average totals are always based on most current and complete years available

