

U.S. Flock Trends and Projections

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Compiled by
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American Egg Board

The Egg Industry Center Market Reports & Industry Analysis are compiled in the memory of their creator, Don D. Bell, Poultry Extension Specialist Emeritus - UC Davis.

U.S. EGG INDUSTRY STATISTICAL REPORT SUMMARY

- * The December hatch (straight-run chicks) was 0.2% higher than December 2018. This projects forward to a 21.2 million pullet placement for May of 2020 which is 0.1 million higher than May of 2019 placement (21.1).
- * Current (December average, 2019) U.S. table egg layer number (340.6 million) is 2.8 percent larger than last year's number at this time (331.3 million), and 1.5 million larger than the previous month (339.1 million).
- * In December, Iowa led the nation with 57.1 million laying hens compared to 35.0 million in Ohio, 34.6 million in Indiana, and 28.5 million in Pennsylvania.
- * The January 1st U.S. rate of lay was 81.0% which is 0.6% higher than the January 1st 2019 level. The total number of table eggs produced in December 2019 was 4.0% higher than the December 2018 production.
- * The December 2019 number of eggs exported was 16% higher than last year (December 2018) and 3% lower than last month (November 2019). The December exports represented 3.2% of the number of eggs produced.
- * Shell eggs broken for products in December 2019 totaled 6.902 million cases, 0.7% more than in December 2018 (6.854 million cases).

Monthly Highlights (Compared to December a year ago) (% change) - U.S.

	2018	2019	% Change
Hatch - Egg-Type Straight Run (thousands) (U.S.)	46,779	46,868	0.2
Table Egg Layers (millions) (U.S.)	331.3	340.6	2.8
Rate of lay percent (January 1, 2020)	80.4	81.0	0.6
Molting (January 1, 2020) (percent in + out of a molt)	14.8	13.5	-8.8

Year-end layers (millions) - U.S.

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Million	286.8	290.1	298.6	308.2	312.9	297.7	320.0	327.9	331.6	340.7	345*

* preliminary value

SPECIAL NOTE:

USDA stopped reporting stats for Texas, Mississippi, Florida and Arkansas. As a consequence, EIC decided to stop reporting stats by region and replaced these tables with shell egg and egg products inventory and consumption.

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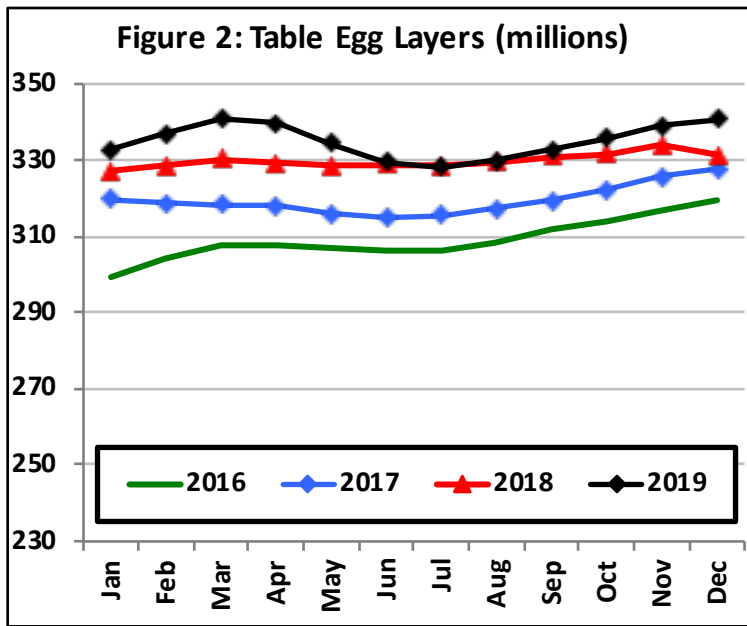
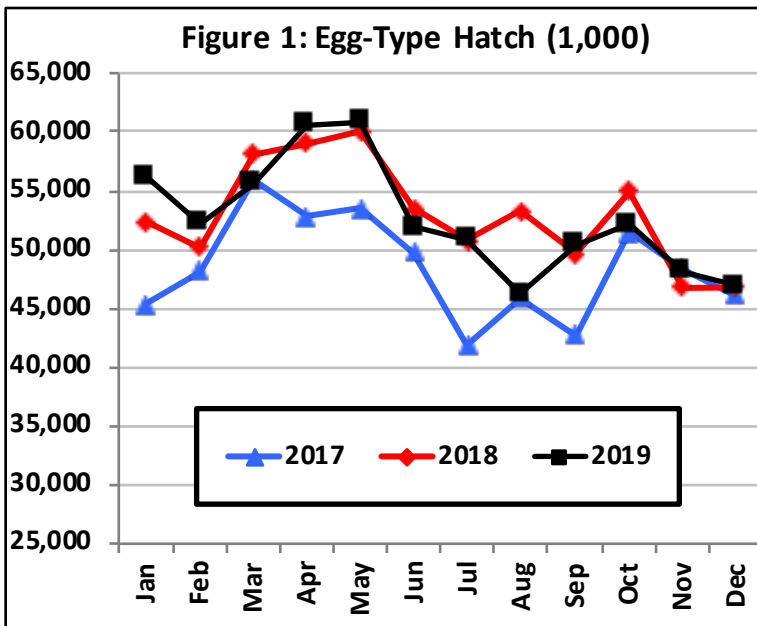
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EGG TYPE: EGGS IN INCUBATORS (on the 1st of the month) and STRAIGHT RUN HATCH (U.S.)

TABLE 1

EGG-TYPE Eggs in Incubators (thousands)				EGG-TYPE Straight Run Hatch (thousands)				
month	2019	2020	Change (%)	month	2017	2018	2019	Change %
Jan	52,153	48,273	-7.4	Jan	45,367	52,313	56,219	7.5
Feb	55,001			Feb	48,127	50,148	52,182	4.1
Mar	53,586			Mar	55,919	58,147	55,658	-4.3
Apr	58,422			Apr	52,762	58,986	60,668	2.9
May	55,489			May	53,506	60,063	60,816	1.3
Jun	51,648			Jun	49,722	53,486	51,858	-3.0
Jul	47,615			Jul	41,862	50,752	50,919	0.3
Aug	47,490			Aug	45,861	53,207	46,246	-13.1
Sep	47,878			Sep	42,725	49,610	50,386	1.6
Oct	48,512			Oct	51,495	54,960	52,066	-5.3
Nov	48,069			Nov	48,344	46,844	48,113	2.7
Dec	47,798			Dec	46,080	46,779	46,868	0.2
1 Month Avg.	52,153	48,273	-7.4	12 Month Avg.	48,481	52,941	52,667	-0.5
1 Month Total	52,153	48,273		12 Month Total	581,770	635,295	631,999	
12 Month Total	560,591			12 Month Total	581,770	635,295		

Source: USDA NASS Chickens and Eggs



AVERAGE U.S. TABLE EGG LAYERS (MILLIONS)

TABLE 2

month	TOTAL Table Egg Layers						% Change with respect to	
	2014	2015	2016	2017	2018	2019	last year	2014-2018
Jan	307.2	311.2	299.3	319.7	327.2	332.6	1.7	6.3
Feb	306.7	310.0	304.0	318.7	328.6	336.8	2.5	7.4
Mar	307.7	310.2	307.4	318.4	330.3	340.9	3.2	8.3
Apr	308.3	305.9	307.4	317.9	329.3	339.6	3.1	8.2
May	307.6	289.3	307.0	315.9	328.7	334.5	1.8	8.0
Jun	307.0	276.9	306.5	314.9	328.8	329.7	0.3	7.5
Jul	308.2	278.1	306.4	315.5	328.6	328.1	-0.2	6.7
Aug	309.6	279.7	308.6	317.3	329.4	329.9	0.2	6.8
Sep	310.4	282.4	311.7	319.4	330.8	332.6	0.5	7.0
Oct	310.7	285.6	313.6	322.2	331.6	335.7	1.2	7.3
Nov	312.7	290.2	316.7	325.8	334.0	339.1	1.5	7.4
Dec	313.8	295.6	319.5	327.7	331.3	340.6	2.8	7.2
12 Month Avg.	309.2	292.9	309.0	319.5	329.9	335.0	1.6	7.3
Annual Avg.	309.2	292.9	309.0	319.5	329.9			

Source: USDA NASS Chickens and Eggs



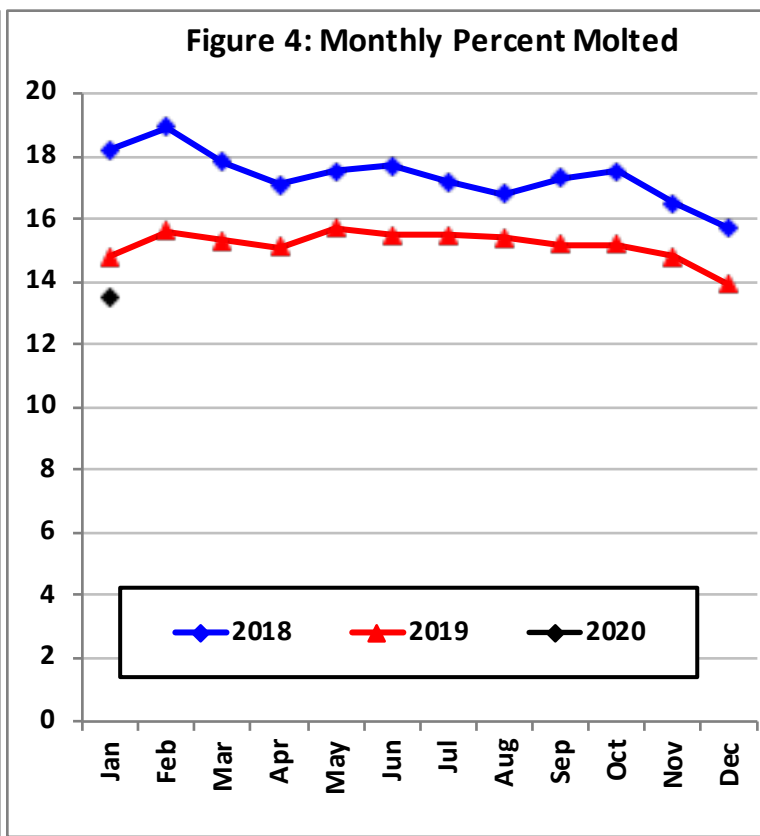
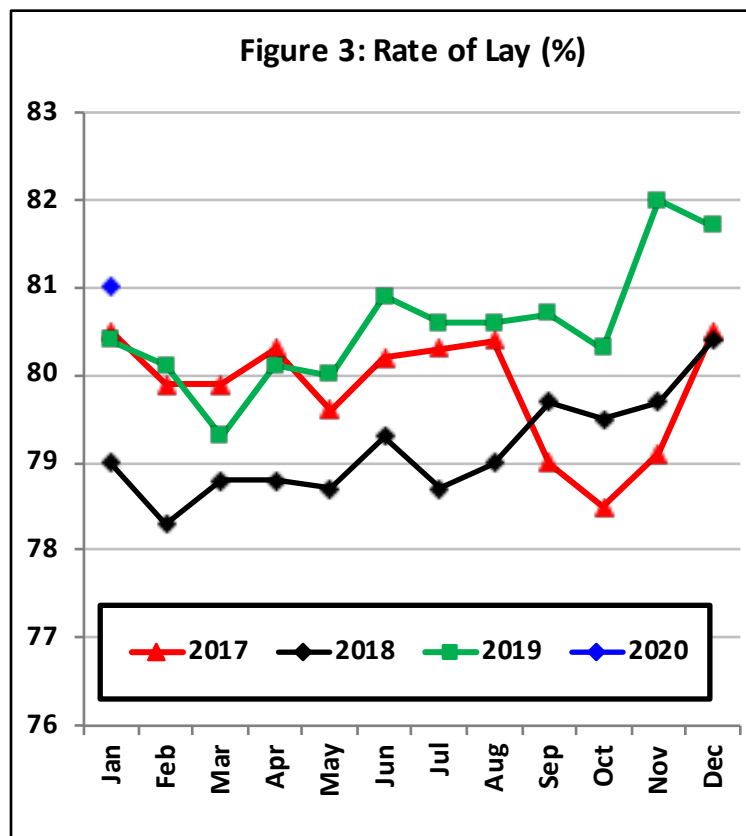
U.S. TABLE EGGS, AND RATE OF LAY on the 1st of EACH MONTH (ALL STATES)

TABLE 3

month	Table Eggs - human consumption (millions)						Rate of Lay (Table)	
	2015	2016	2017	2018	2019	Change (%)	2019	2020
Jan	7,545	7,168	7,948	7,983	8,275	3.7	80.4	81.0
Feb	6,726	6,878	7,130	7,227	7,517	4.0	80.1	
Mar	7,566	7,475	7,908	8,070	8,424	4.4	79.3	
Apr	7,252	7,213	7,627	7,785	8,160	4.8	80.1	
May	6,996	7,479	7,828	8,056	8,346	3.6	80.0	
Jun	6,464	7,228	7,583	7,798	7,991	2.5	80.9	
Jul	6,698	7,514	7,863	8,036	8,200	2.1	80.6	
Aug	6,729	7,597	7,843	8,106	8,254	1.8	80.6	
Sep	6,544	7,402	7,549	7,899	8,035	1.7	80.7	
Oct	6,837	7,724	7,873	8,185	8,447	3.2	80.3	
Nov	6,778	7,602	7,800	8,024	8,328	3.8	82.0	
Dec	7,125	7,969	8,106	8,259	8,591	4.0	81.7	
YTD Avg.	6,938	7,437	7,755	7,952	8,214	3.3	80.4	81.0
Annual Avg.	6,938	7,437	7,755	7,952			80.6	
Total	83,260	89,249	93,056	95,428				

Source: USDA NASS Chickens and Eggs

The rate of lay was changed from the monthly average to the rate of lay on the 1st of each month on November 2017.



INDUCED MOLT PERCENT - U.S. TOTALS (1ST OF MONTH)

TABLE 4

month	In a Molt		Completed a Molt		In a molt + Completed a Molt			Change
	2019	2020	2019	2020	2018	2019	2020	
Jan	1.5	1.6	13.3	11.9	18.2	14.8	13.5	-1.3
Feb	2.6		13.0		18.9	15.6		
Mar	1.5		13.8		17.8	15.3		
Apr	1.3		13.8		17.1	15.1		
May	2.5		13.2		17.5	15.7		
Jun	2.1		13.4		17.7	15.5		
Jul	2.0		13.5		17.2	15.5		
Aug	2.0		13.4		16.8	15.4		
Sep	2.0		13.2		17.3	15.2		
Oct	1.9		13.3		17.5	15.2		
Nov	1.5		13.3		16.5	14.8		
Dec	1.0		12.9		15.7	13.9		
1 Month Avg.	1.5	1.6	13.3	11.9	18.2	14.8	13.5	-1.3
12 Month Avg.	1.8		13.3		17.4	15.2		

Source: USDA NASS Chickens and Eggs

SHELL EGGS BROKEN UNDER FEDERAL INSPECTION (MILLION CASES)

TABLE 5

month	2014	2015	2016	2017	2018	2019	% Change with respect to last year 2014-2018	
Jan	5.865	6.634	5.639	6.540	6.482	7.018	8.3	12.6
Feb	5.325	5.746	5.484	6.192	5.904	6.360	7.7	11.0
Mar	6.086	6.030	6.308	6.601	6.218	6.847	10.1	9.6
Apr	6.205	6.061	6.255	6.126	6.403	6.870	7.3	10.6
May	6.514	5.533	6.576	6.547	6.922	7.335	6.0	14.3
Jun	6.532	6.408	6.679	6.604	6.891	6.801	-1.3	2.7
Jul	6.618	5.641	6.474	6.376	6.770	6.865	1.4	7.7
Aug	6.596	5.589	6.804	6.603	7.110	7.062	-0.7	8.0
Sep	6.566	5.583	6.539	6.126	6.793	6.834	0.6	8.1
Oct	6.731	5.814	6.636	6.583	7.045	7.408	5.2	12.9
Nov	6.086	5.350	6.499	6.296	6.593	6.438	-2.4	4.4
Dec	6.281	5.749	6.498	6.306	6.854	6.902	0.7	8.9
12 Month Avg.	6.284	5.845	6.366	6.408	6.665	6.895	3.4	9.2
12 Month Total	75.405	70.138	76.391	76.901	79.983	82.740		
12 Month Total	75.405	70.138	76.391	76.901	79.983			

Source: USDA NASS Egg products - monthly

Million Cases Produced
% BROKEN

231.279	247.915	258.489	265.079	273.800
30.3	30.8	29.8	30.2	30.2



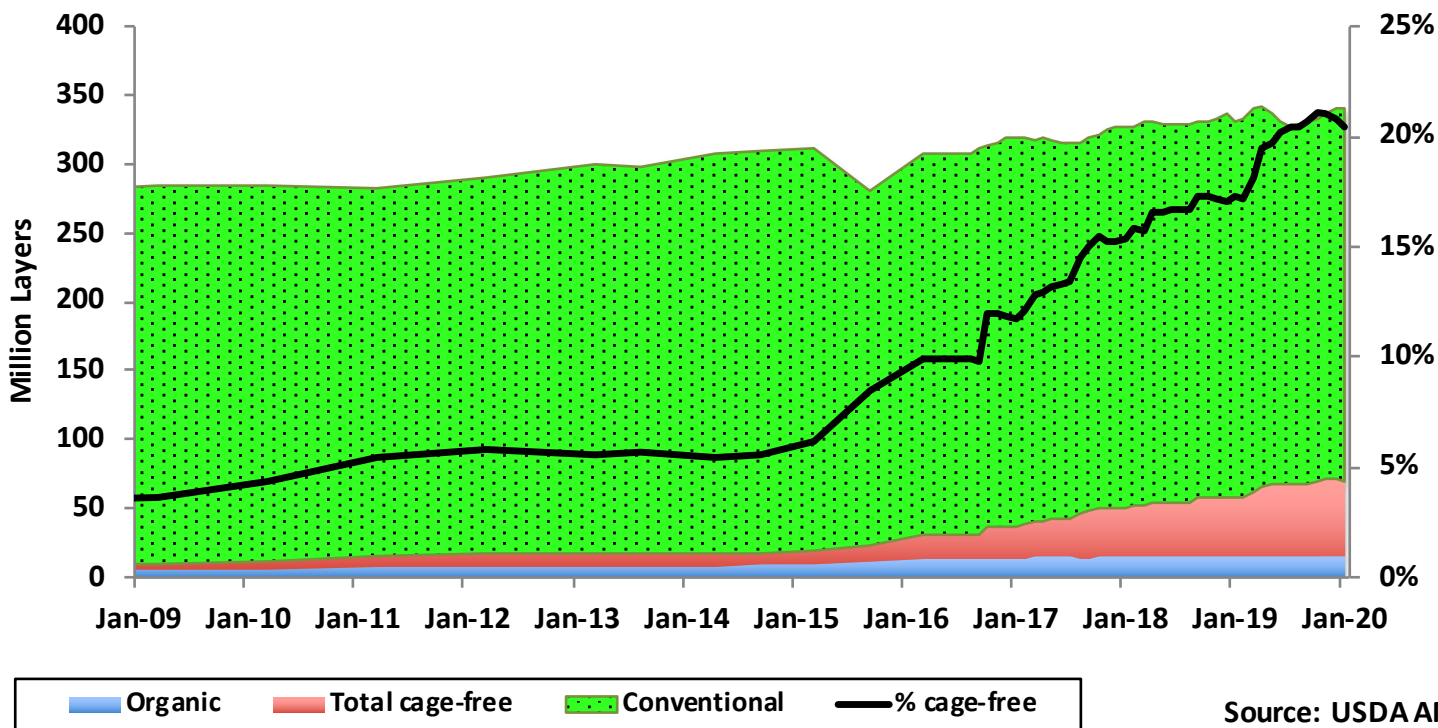
CAGE-FREE LAYERS (MILLIONS)

TABLE 6

	Non-Organic Cage-Free		Certified Organic		TOTAL Cage-Free Layers			Cage-Free % of U.S. Flock
	2019	2020	2019	2020	2019	2020	Change (%)	
January	41.5	54.0	15.7	15.7	57.2	69.6	22%	20.4%
February	41.6		15.7		57.3			
March	46.8		15.0		61.9			
April	50.7		15.7		66.4			
May	50.9		15.8		66.7			
June	51.3		15.8		67.1			
July	51.3		15.8		67.1			
August	51.3		15.8		67.1			
September	52.7		15.8		68.5			
October	54.2		16.1		70.3			
November	54.6		16.2		70.8			
December	54.6		16.2		70.8			
1 Month Avg.	41.5	54.0	15.7	15.7	57.2	69.6	22%	20.4%
12 Month Avg.	50.1		15.8		65.9			

Source: USDA AMS (Monthly USDA Cage-Free Shell Egg Report)

Figure 5: U.S. Cage-Free and Conventional Layers



Source: USDA AMS

EXPORT OF TABLE EGGS IN THE SHELL IN 2019 (Thousand cases- 30 doz)

TABLE 7

Month \ To	North	Central	European		Southeast		Middle	Total 2019	Total 2018	% of U.S. Production
	America	America	Caribbean	Union-28	East Asia	Asia	East			
Jan	108.7	0.0	16.4	0.0	102.8	0.0	14.5	244.8	284.1	1.07
Feb	50.2	0.0	20.2	0.0	94.5	0.0	7.5	173.9	231.7	0.83
Mar	199.1	0.0	18.1	0.2	155.5	0.1	9.7	386.5	246.7	1.65
Apr	249.3	0.8	14.7	0.2	129.8	0.0	5.3	404.5	311.9	1.78
May	213.4	0.0	10.2	0.0	180.7	0.0	3.0	411.3	324.1	1.77
Jun	144.0	0.0	13.9	0.0	196.0	0.0	1.1	359.0	273.5	1.62
Jul	141.1	1.0	10.2	0.0	172.0	0.0	8.5	338.0	273.3	1.48
Aug	220.6	0.0	13.3	0.0	156.9	0.0	30.8	425.5	373.8	1.86
Sep	248.7	0.0	14.4	0.2	122.1	0.0	14.9	406.1	363.2	1.82
Oct	366.0	0.0	12.3	0.1	197.3	0.0	16.6	596.5	471.1	2.54
Nov	167.1	0.0	11.9	0.1	144.1	0.0	0.9	330.9	314.4	1.43
Dec	215.3	0.0	16.5	0.1	114.0	0.0	7.7	356.2	352.6	1.49
12 Mo. Total	2,323.7	1.9	172.2	0.9	1,765.9	0.1	120.6	4,433.3	3,820.4	1.61
%	52.4	0.0	3.9	0.0	39.8	0.0	2.7			

Source: USDA Foreign Agric. Service from U.S. Dept. of Commerce, U.S. Census Bureau, Foreign Trade Stats

EXPORT OF EGG PRODUCTS IN 2019 (EQUIVALENT: thousand cases- 30 doz)

TABLE 8

Month \ To	North	Central	European		Southeast		Middle	Total 2019	Total 2018	% of U.S. Production
	America	America	Caribbean	Union-28	East Asia	Asia	East			
Jan	135.7	14.2	10.7	7.7	105.5	8.7	4.0	297.5	471.5	1.29
Feb	136.0	2.3	16.5	7.1	62.2	23.2	3.8	270.9	511.4	1.30
Mar	176.3	5.9	10.3	6.3	56.4	2.2	7.1	283.0	461.0	1.21
Apr	160.3	5.1	24.8	1.3	80.7	24.6	10.4	333.3	493.7	1.47
May	137.8	8.9	7.7	7.2	120.1	9.3	5.0	326.5	445.8	1.41
Jun	150.4	12.1	11.2	3.0	113.2	41.2	6.4	373.5	354.6	1.68
Jul	188.3	18.3	10.3	2.7	79.6	11.2	5.9	347.5	370.8	1.53
Aug	131.0	4.2	12.8	3.0	108.6	25.4	9.6	345.1	346.3	1.51
Sep	122.7	7.3	5.2	4.0	113.1	0.1	2.5	315.5	337.6	1.41
Oct	155.3	8.2	12.0	5.0	124.5	23.5	2.3	360.8	306.0	1.54
Nov	193.5	7.2	13.8	7.3	132.5	32.1	6.3	464.9	329.0	2.01
Dec	132.3	6.0	11.1	21.5	150.5	33.2	7.7	415.5	310.8	1.74
12 Mo. Total	1,819.4	99.6	146.5	75.9	1,246.8	234.8	71.2	4,134.0	4,738.5	1.51
%	44.0	2.4	3.5	1.8	30.2	5.7	1.7			

Note: Information has been converted from metric tonnes at a rate of 42 lbs. per case of liquid egg (edible + inedibles).

Source: USDA Economic Research Service from U.S. Dept. of Commerce, U.S. Census Bureau, Foreign Trade Stats.

TOTAL EGGS EXPORTED - 2019

TABLE 9

	Table Eggs Produced		Shell Eggs Exported		Egg Products Exported		Total Exported	
	(000) Cases		(000) Cases	% of U.S.	(000) Cases	% of U.S.	(000) Cases	% of U.S.
Jan	22,987		244.8	1.07	297.5	1.29	542.3	2.36
Feb	20,879		173.9	0.83	270.9	1.30	444.7	2.13
Mar	23,401		386.5	1.65	283.0	1.21	669.6	2.86
Apr	22,667		404.5	1.78	333.3	1.47	737.8	3.26
May	23,184		411.3	1.77	326.5	1.41	737.8	3.18
Jun	22,197		359.0	1.62	373.5	1.68	732.5	3.30
Jul	22,779		338.0	1.48	347.5	1.53	685.5	3.01
Aug	22,928		425.5	1.86	345.1	1.51	770.6	3.36
Sep	22,319		406.1	1.82	315.5	1.41	721.6	3.23
Oct	23,463		596.5	2.54	360.8	1.54	957.3	4.08
Nov	23,134		330.9	1.43	464.9	2.01	795.8	3.44
Dec	23,864		356.2	1.49	415.5	1.74	771.7	3.23
Total/Av	273,800		4,433.3	1.62	4,134.0	1.51	8,567.3	3.13



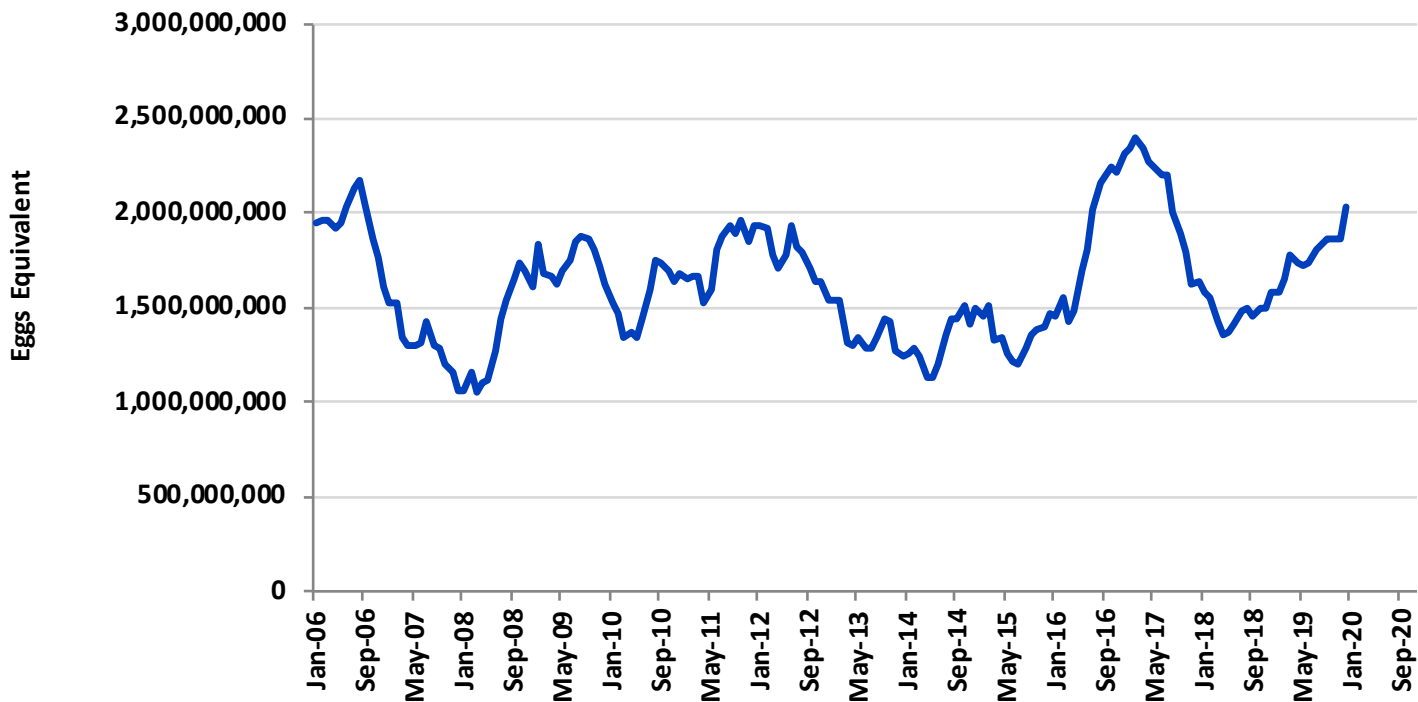
Egg Inventory at the Beginning of the Month

TABLE 10

month	Shell Eggs (eggs)			2020-2019	Egg Products (eggs equivalent)			2020-2019
	2018	2019	2020	% Change	2018	2019	2020	% Change
JAN	588,888,000	637,344,000	738,540,000	16%	1,047,558,765	942,881,484	1,294,769,802	37%
FEB	527,652,000	547,956,000			1,057,913,844	1,029,023,582		
MAR	574,560,000	615,672,000			984,399,906	1,037,123,073		
APR	557,604,000	725,364,000			864,324,599	1,049,273,001		
MAY	613,836,000	705,240,000			745,236,648	1,031,717,861		
JUN	625,140,000	666,000,000			744,536,232	1,059,795,872		
JUL	576,972,000	616,608,000			835,816,631	1,122,375,546		
AUG	613,548,000	641,772,000			871,527,787	1,169,432,459		
SEP	619,488,000	620,856,000			882,200,742	1,210,612,240		
OCT	630,000,000	638,964,000			819,763,724	1,223,244,103		
NOV	643,176,000	636,444,000			858,254,954	1,225,657,161		
DEC	626,544,000	660,276,000			870,841,984	1,208,744,400		
1 Month Avg.	588,888,000	637,344,000	738,540,000	16%	1,047,558,765	942,881,484	1,294,769,802	37%
12 Month Avg.	599,784,000	642,708,000			881,864,651	1,109,156,732		

Assumes: 12.5% drying yield for drying egg whites, 46.3% drying yield for drying egg yolks, 25% drying yield for drying whole egg, and 48.84 grams of edible egg per egg broken for further processing

Figure 6: Total inventory of eggs (shell + egg products)



CONSUMPTION of EGGS per PERSON

TABLE 11

month	Shell Eggs (eggs/person)			19 - 18	Egg Products (eggs/person)			19 - 18
	2017	2018	2019	Change	2017	2018	2019	Change
JAN	17.1	17.0	17.2	0.3	6.9	6.6	7.2	0.5
FEB	14.8	15.4	15.7	0.4	6.3	6.3	6.7	0.4
MAR	16.8	17.6	17.7	0.1	7.1	6.8	7.2	0.4
APR	16.4	16.4	16.8	0.4	6.5	6.9	7.3	0.3
MAY	16.6	16.7	16.9	0.2	7.1	7.2	7.6	0.4
JUN	15.8	16.0	16.5	0.5	6.9	7.0	6.9	-0.1
JUL	16.9	16.9	17.1	0.2	6.8	7.0	7.0	0.0
AUG	16.5	16.7	16.9	0.3	7.3	7.5	7.3	-0.2
SEP	16.1	16.4	16.5	0.1	6.7	7.3	7.1	-0.2
OCT	16.6	16.9	16.9	0.0	7.1	7.4	7.8	0.4
NOV	16.7	16.9	17.8	0.9	6.8	6.9	6.6	-0.3
DEC	17.5	17.3	18.0	0.7	6.6	7.0	6.9	-0.2
12 Month Sum	197.8	200.2	204.2	4.0	82.1	83.9	85.6	1.8
12 Month Sum	197.8	200.2			82.1	83.9		

USDA ERS is projecting a 3.4 eggs/person increase in total consumption for 2020 with respect to 2019

Figure 7: Consumption of shell eggs and egg products 12-month running sum (eggs/person)

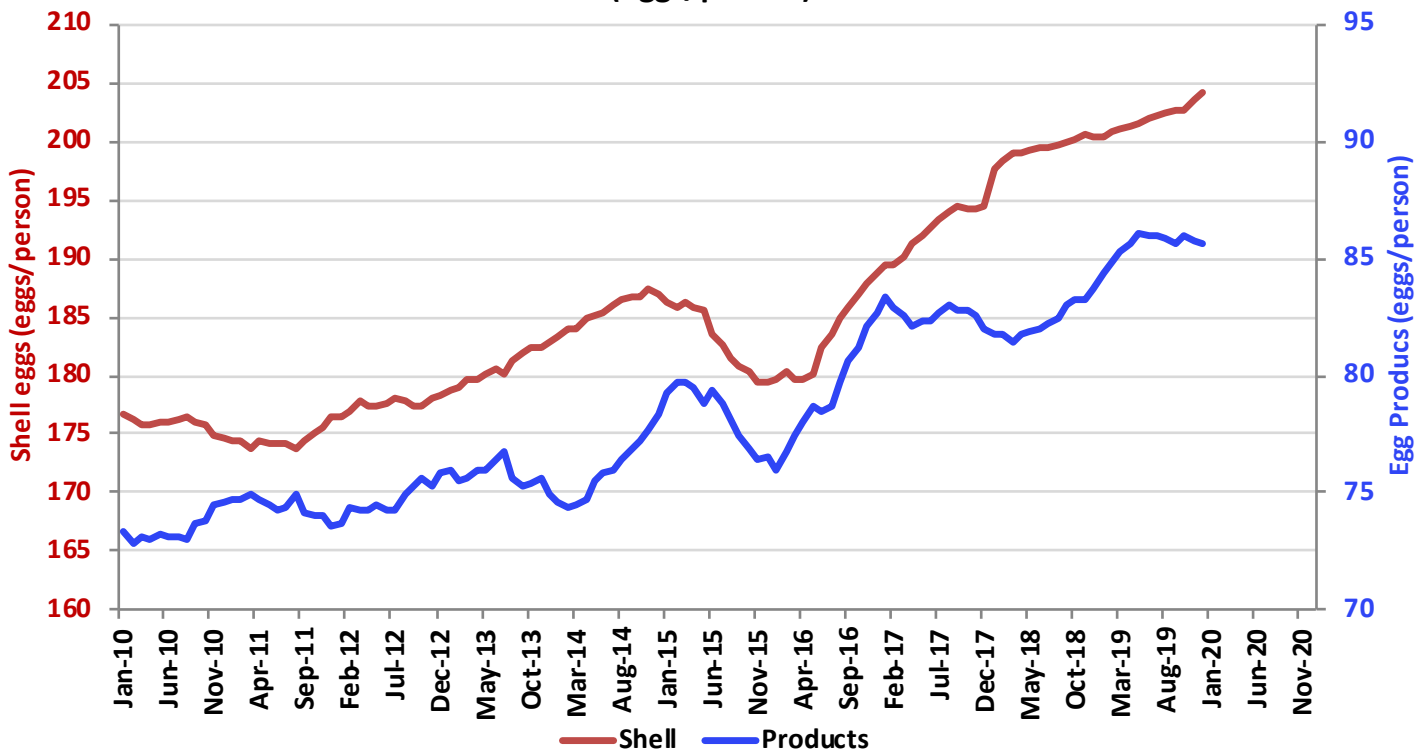


TABLE EGG LAYERS IN LEADING STATES - (LAYERS IN 30,000+ HEN FLOCKS) - 2019

TABLE 12

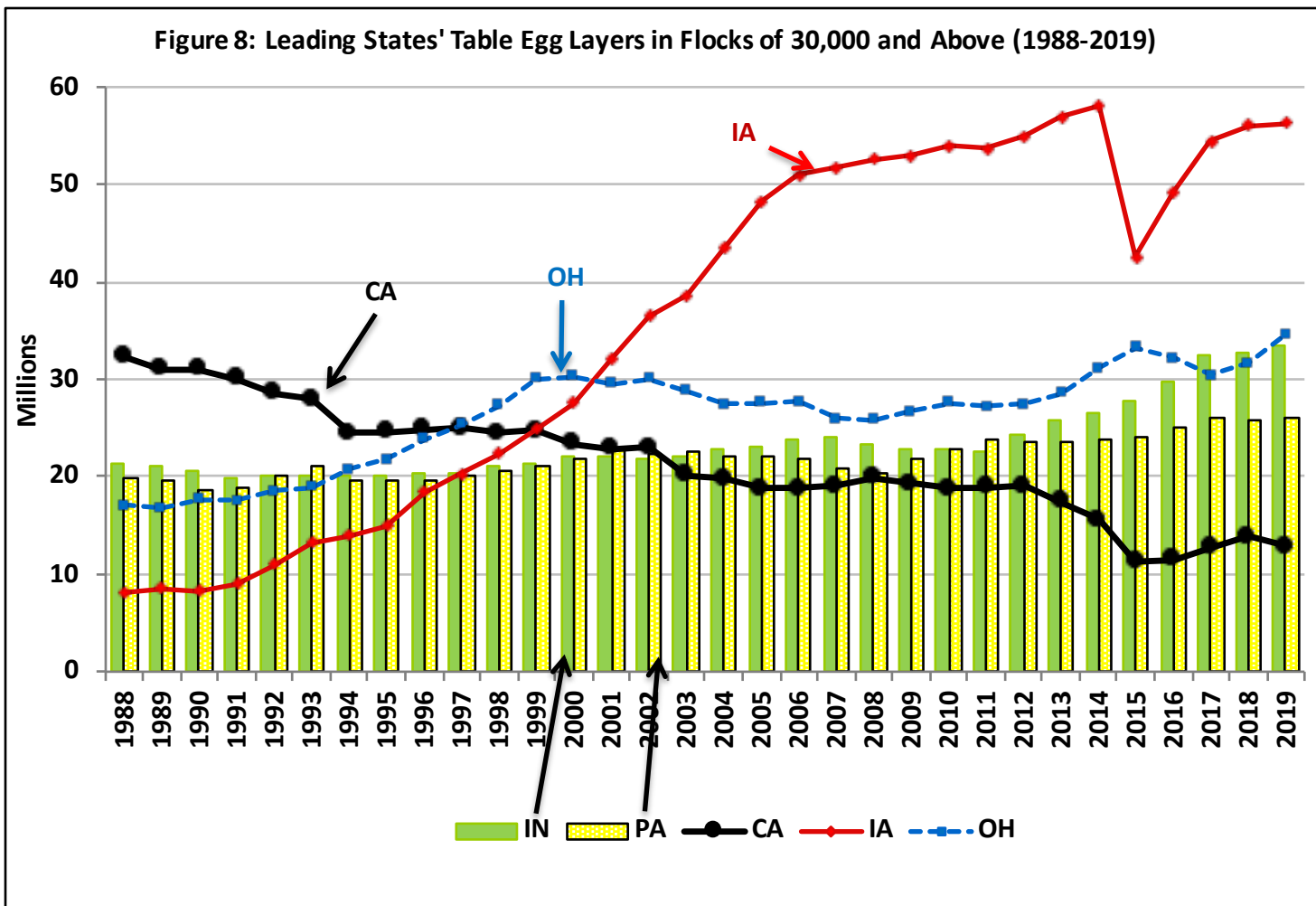
month	IA	OH	IN	PA	CA	U.S.
Dec-2018	56.03	31.55	33.44	26.14	14.24	321.48
	(Millions)					
Jan-2019	55.63	31.55	33.85	25.86	13.73	319.94
Feb-2019	56.38	33.81	34.19	25.52	13.05	321.33
Mar-2019	57.50	36.08	34.03	25.38	12.93	325.39
Apr-2019	57.55	35.75	33.72	25.27	12.88	324.12
May-2019	56.84	34.71	33.30	25.54	12.78	319.06
Jun-2019	55.84	34.36	32.56	25.58	12.51	314.24
Jul-2019	55.38	34.65	32.22	25.49	11.97	312.60
Aug-2019	55.64	34.82	32.54	25.65	12.53	314.46
Sep-2019	55.88	34.91	33.09	25.56	13.16	317.10
Oct-2019	55.74	35.00	33.60	26.88	12.76	320.24
Nov-2019	56.35	35.42	34.20	28.17	12.87	323.65
Dec-2019	57.11	35.02	34.59	28.53	13.35	325.11
12 Month Avg.	56.32	34.67	33.49	26.12	12.88	319.77

Source: USDA NASS Chickens and Eggs

In March 2019 USDA stopped reporting the number of table egg layers for Texas which was the 5th largest egg producing State then.

% of all U.S. table egg layers in flocks with 30,000 or more hens =	95.5%
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Figure 8: Leading States' Table Egg Layers in Flocks of 30,000 and Above (1988-2019)



PROJECTED U.S. EGG-TYPE HATCHERY SUPPLY FLOCK (Millions)

TABLE 13

month	2014	2015	2016	2017	2018	2019	2020
Jan	2.540	2.682	3.081	2.581	2.741	2.142	2.484
Feb	2.536	2.689	3.074	2.598	2.705	2.078	2.556
Mar	2.472	2.605	2.997	2.742	2.541	2.122	2.558
Apr	2.530	2.718	2.840	2.705	2.549	2.120	2.647
May	2.497	2.917	2.805	2.699	2.434	2.145	2.624
Jun	2.439	2.892	2.866	2.747	2.325	2.246	2.566
Jul	2.608	2.797	2.836	2.696	2.434	2.219	2.581
Aug	2.535	2.797	2.725	2.764	2.442	2.253	
Sep	2.553	2.857	2.615	2.755	2.418	2.297	
Oct	2.610	2.958	2.446	2.782	2.413	2.301	
Nov	2.619	2.937	2.566	2.685	2.386	2.374	
Dec	2.664	2.947	2.650	2.659	2.296	2.389	
7 month avg.	2.517	2.757	2.928	2.681	2.533	2.153	2.574
12 month avg.	2.550	2.816	2.792	2.701	2.474	2.224	

Source: USDA NASS Chickens and Eggs

Note: The hatchery supply flock estimates are made by using 7 to 18 months prior hatch minus 9% mortality

PULLETS TO BE HOUSED BASED UPON U.S. HATCH 5 MONTH AGO (Millions)
(47.5% of CHICKS PLACED multiplied by a 95% LIVABILITY FACTOR)

TABLE 14

month	2015	2016	2017	2018	2019	2020	2015 to '19 month avg.
Jan	17.9	21.3	19.5	20.7	24.0	20.9	20.7
Feb	18.4	21.5	18.9	18.0	20.9	22.0	19.5
Mar	20.2	22.7	19.6	23.2	24.8	23.5	22.1
Apr	16.5	20.7	18.8	21.8	21.1	21.7	19.8
May	18.2	21.1	20.6	20.8	21.1	21.1	20.4
Jun	18.0	20.9	19.8	22.8	24.6		21.2
Jul	20.7	27.1	24.0	25.1	26.1		24.6
Aug	21.4	25.7	25.2	26.2	25.1		24.8
Sep	21.4	23.1	23.8	26.6	27.4		24.5
Oct	21.8	25.9	24.1	27.1	27.4		25.3
Nov	21.3	26.0	22.4	24.1	23.4		23.5
Dec	19.3	18.8	18.9	22.9	23.0		20.6
5 month avg.	18.2	21.4	19.5	20.9	22.4	21.8	20.5
Annual Avg.	19.6	22.9	21.3	23.3	24.1		22.2
Total	235.1	274.7	255.8	279.4	288.9		266.8

Source: USDA NASS Chickens and Eggs

% Change to date

-2.46

Note: The number of pullets to be housed was reduced by 6 million based on the number reported as lost to avian influenza. We assumed the reduction as evenly spread during the period between May and September 2015 (assuming that the ages of affected birds was evenly distributed).

PROJECTED U.S. TABLE EGG FLOCK MORE THAN 70 WEEKS OF AGE (% of layers)

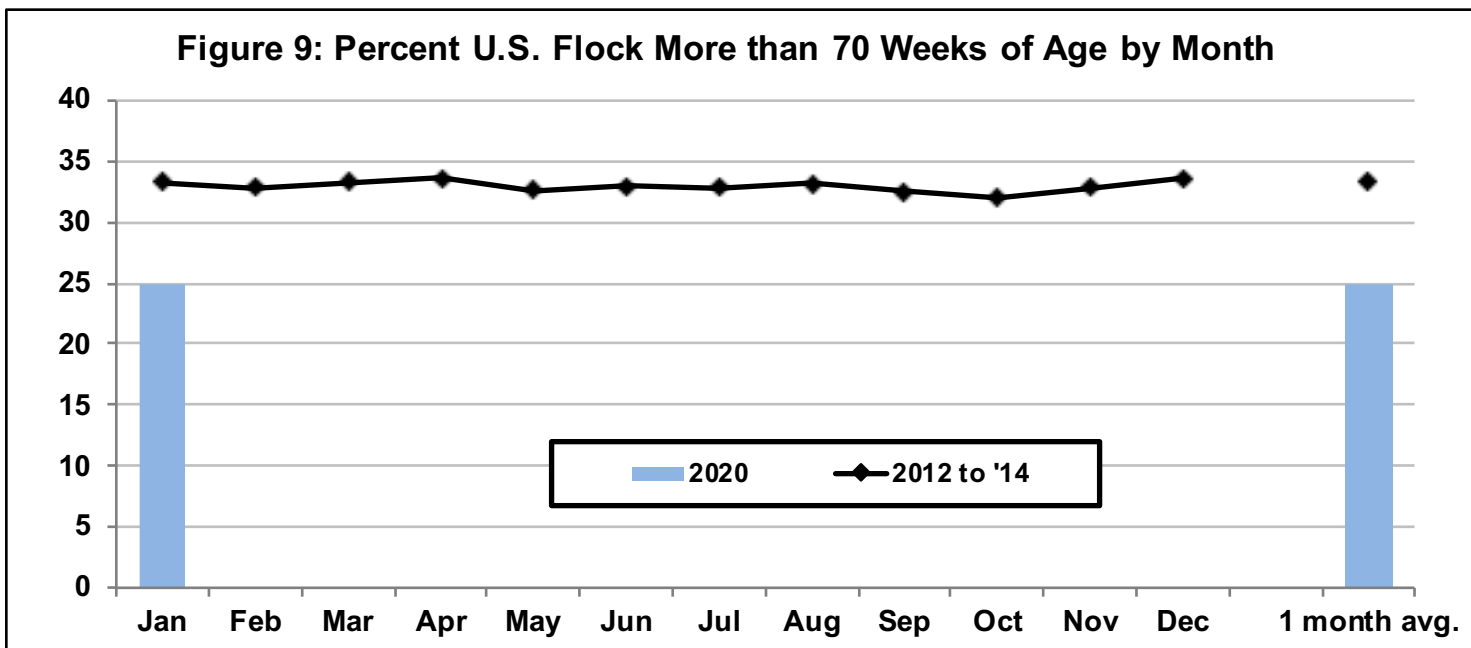
TABLE 15

	% of National Flock over 70 weeks of age (on the 1st of the month)							2012 to '14
	2015	2016	2017	2018	2019	2020		
Jan	32.2		24.3	29.4	22.5	24.9	33.3	
Feb	31.1		24.5	27.8	22.1		32.9	
Mar	32.0		24.9	28.3	23.5		33.3	
Apr			25.4	28.1	24.6		33.6	
May			26.2	27.3	22.8		32.7	
Jun			27.0	28.0	22.2		33.0	
Jul			26.3	27.4	21.8		32.9	
Aug			27.2	26.5	21.8		33.2	
Sep			28.3	25.6	21.6		32.5	
Oct			27.6	24.2	21.9		32.0	
Nov		21.4	28.6	23.8	22.9		32.9	
Dec		23.4	29.3	23.3	24.3		33.6	
1 month avg.	32.2		24.3	29.4	22.5	24.9	33.3	
12 month avg.	31.7		26.6	26.6	22.7		33.0	

Source: Egg Industry Center based on USDA NASS Chickens and Eggs data

Note: The number of layers younger than 70 weeks of age are estimated as the sum of the Egg-Type Chicks Hatched between 6 and 16 months before adjusted by a 47.5% of CHICKS PLACED multiplied by a 95% LIVABILITY FACTOR for pullets and a 98% average LIVABILITY FACTOR FOR LAYERS between 20 and 70 weeks of age.

Figure 9: Percent U.S. Flock More than 70 Weeks of Age by Month



FLOCK SIZE PROJECTION

The U.S. flock size is projected for the current year and the following year for each month. Projections start with the first of the month official USDA count and are then adjusted monthly. Adjustments are made considering the most recent:

1. Hatch data (projected 5-months into the future with mortality). Subsequent pullets added are estimated using the linear regression listed below for each month.
 Added /Beginning ratio estimated as: $0.08748 - 0.00486 * \text{Price 12-18 Jan} - 0.00665 * \text{Price 12-18 Feb} - 0.00275 * \text{Price 12-18 Mar} - 0.00632 * \text{Price 12-18 Apr} - 0.00416 * \text{Price 12-18 May} - 0.00294 * \text{Price 12-18 Jun} + 0.0033 * \text{Price 12-18 Jul} + 0.00364 * \text{Price 12-18 Aug} + 0.00426 * \text{Price 12-18 Sep} + 0.00459 * \text{Price 12-18 Oct} - 0.00064 * \text{Price 12-18 Nov} - 0.00574 * \text{Price 12-18 Dec} - 0.00094 * \text{MOLT - previous 12-mo}$
 ... where "Egg Price 12-18 mo earlier" is the average price of Midwest Large eggs for the months 12 to 18 before the month we are trying to project
 ... where "MOLT - previous 12-mo" is the previous 12 months average of the percentage of layers molted
 Adjusted R²=0.72

2. All birds coming out of production by any reason are included in the "Slaughter, Died and Missing" category. This is estimated as Beginning count + Added - Ending count. Subsequent layers coming out of production are estimated using the linear regression listed below for each month.
 Slaughter, Died & Missing/Beginning ratio estimated as: $= 0.01395 + 0.79519 * \text{Added /Beg. count} + 0.0039 * \text{Jan} - 0.0046 * \text{Feb} - 0.00214 * \text{Mar} + 0.00567 * \text{Apr} + 0.00251 * \text{May} - 0.00061 * \text{Jun} - 0.00096 * \text{Jul} - 0.00605 * \text{Aug} - 0.0022 * \text{Sep} - 0.00934 * \text{Oct} - 0.01192 * \text{Nov} + 0.01792 * \text{Shock Sep} + 0.00923 * \text{"Adj. Price <0.80 Qtr 4"}$
 ... where "Added /Beg. count " is the ratio between the pullets added and the beginning flock count for the month we are trying to project
 ... where "ShockSep" is a dummy variable to capture the losses experienced after the year 2010 SE recall
 ... where "Adj. Price <0.80 Qtr 4" is a dummy variable that takes the value one if the CPI adjusted Urner Barry midwest large price in the last quarter of the year is lower than 0.8 and zero otherwise
 Adjusted R²=0.60

First of the Month Projection Estimates of U.S. Table Egg Layers (millions)

TABLE 16

Actual	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
340.7	338.9	340.0	340.7	338.3	337.1	337.3	338.0	340.5	342.0	343.1	344.7

Project. Year end:

Dec 31, 2020 - 345

Note: Actual values source = Chickens and Eggs Report - USDA NASS



Calculated on: February 2020

2019 Bird Flow by Month

Table 17

ACTUAL FLOCK (million birds)				
month	Beginning Count	Pullets added ¹	Slaughter, Died & Missing	Ending count
Jan-19	331.6	24.0	22.0	333.6
Feb-19	333.6	20.9	14.5	340.0
Mar-19	340.0	24.8	23.1	341.7
Apr-19	341.7	21.1	25.4	337.5
May-19	337.5	21.1	27.0	331.6
Jun-19	331.6	24.6	28.3	327.8
Jul-19	327.8	26.1	25.6	328.3
Aug-19	328.3	25.1	21.9	331.5
Sep-19	331.5	27.4	25.3	333.6
Oct-19	333.6	27.4	23.2	337.8
Nov-19	337.8	23.4	20.8	340.4
Dec-19	340.4	23.0	22.7	340.7
Jan-20	340.7	20.9		
Feb-20		21.2		
Mar-20		23.5		
Apr-20		21.7		
May-20		21.1		
Jun-20				
Jul-20				
Aug-20				
Sep-20				
Oct-20				
Nov-20				
Dec-20				

¹ at 5 months of age

Table 18

PROJECTED FLOCK (million birds)				
month	Beginning Count	Pullets added ¹	Slaughter, Died & Missing	Ending count
Jan-19	331.6	24.0	22.0	333.6
Feb-19	333.6	20.9	14.5	340.0
Mar-19	340.0	24.8	23.1	341.7
Apr-19	341.7	21.1	25.4	337.5
May-19	337.5	21.1	27.0	331.6
Jun-19	331.6	24.6	28.3	327.8
Jul-19	327.8	26.1	25.6	328.3
Aug-19	328.3	25.1	21.9	331.5
Sep-19	331.5	27.4	25.3	333.6
Oct-19	333.6	27.4	23.2	337.8
Nov-19	337.8	23.4	20.8	340.4
Dec-19	340.4	23.0	22.7	340.7
Jan-20	340.7	20.9	22.7	338.9
Feb-20	338.9	21.2	20.1	340.0
Mar-20	340.0	23.5	22.8	340.7
Apr-20	340.7	21.7	24.0	338.3
May-20	338.3	21.1	22.4	337.1
Jun-20	337.1	23.7	23.5	337.3
Jul-20	337.3	25.6	24.9	338.0
Aug-20	338.0	25.7	23.2	340.5
Sep-20	340.5	26.0	24.5	342.0
Oct-20	342.0	26.2	25.2	343.1
Nov-20	343.1	24.9	23.2	344.7
Dec-20	344.7			

¹ at 5 months of age

Actual number



2020 U.S. Flock Size: EIC Projections and USDA Reported Numbers

Table 19

EIC projected	USDA preliminary	USDA actual count
---------------	------------------	-------------------

For February 2020

Number of U.S. table egg layers (million) on the 1st of each month

Month & Year	Month when the Layer Number was Reported by USDA (highlighted) or Projected by EIC											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Jan-20	340.7											
Feb-20	338.9											
Mar-20	340.0											
Apr-20	340.7											
May-20	338.3											
Jun-20	337.1											
Jul-20	337.3											
Aug-20	338.0											
Sep-20	340.5											
Oct-20	342.0											
Nov-20	343.1											
Dec-20	344.7											
Jan-21												
Feb-21												
Mar-21												
Apr-21												
May-21												
Jun-21												
Jul-21												
Aug-21												
Sep-21												
Oct-21												
Nov-21												
Dec-21												

THIS PAGE HELPS VISUALIZE CHANGES IN FLOCK PROJECTIONS AS THE YEAR EVOLVES



Figure 10: U.S. Monthly Table-Egg Layers (2009-2019)

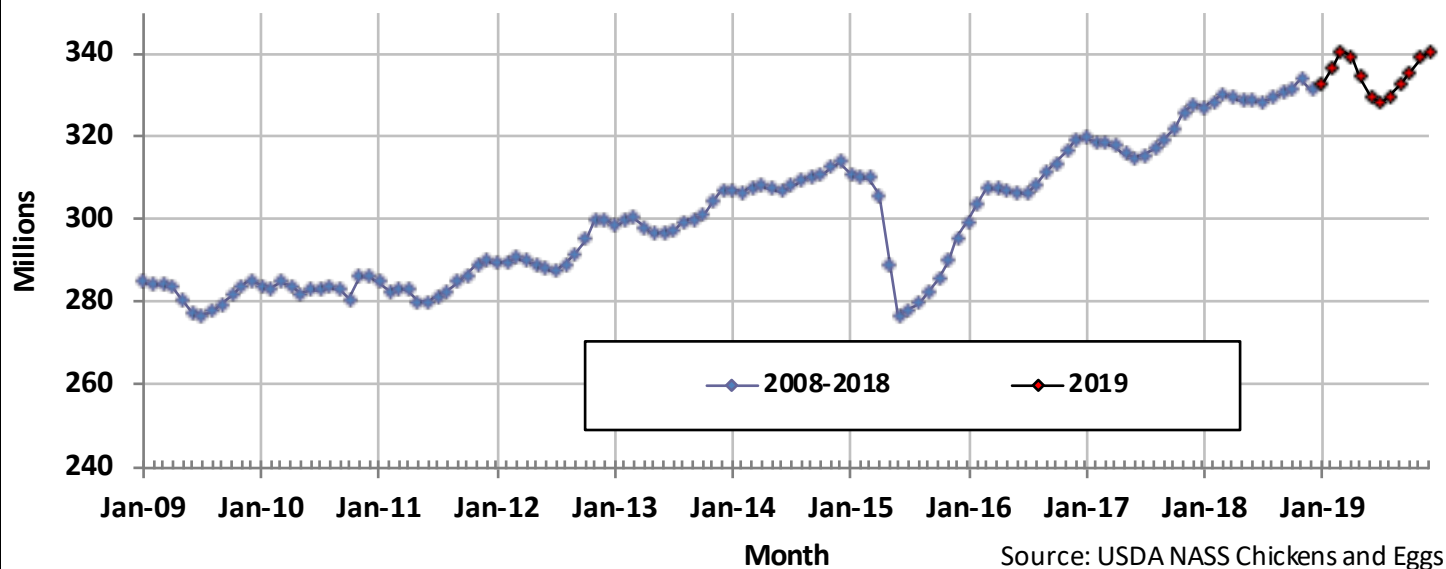


Figure 11: U.S. Table Eggs per Hundred Hens per Day by Month (2009-2019)

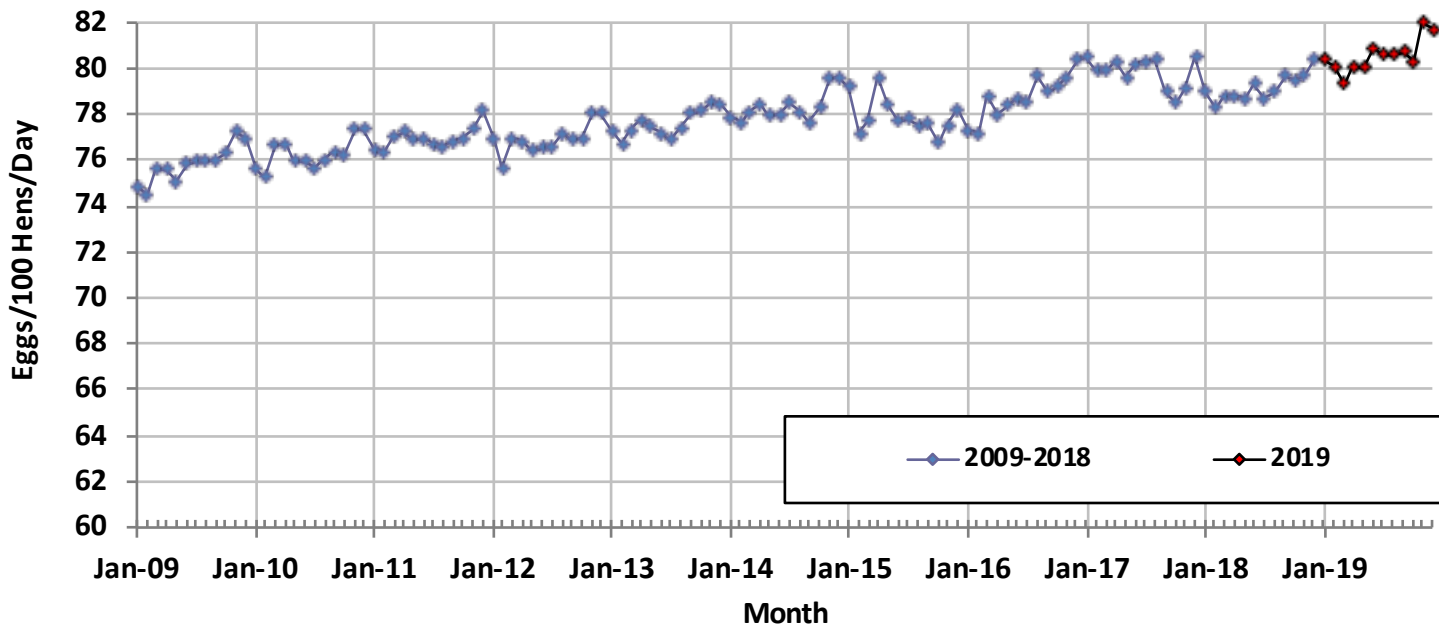


Figure 12: Monthly Percent of U.S. Flock Molted (2010-2020)

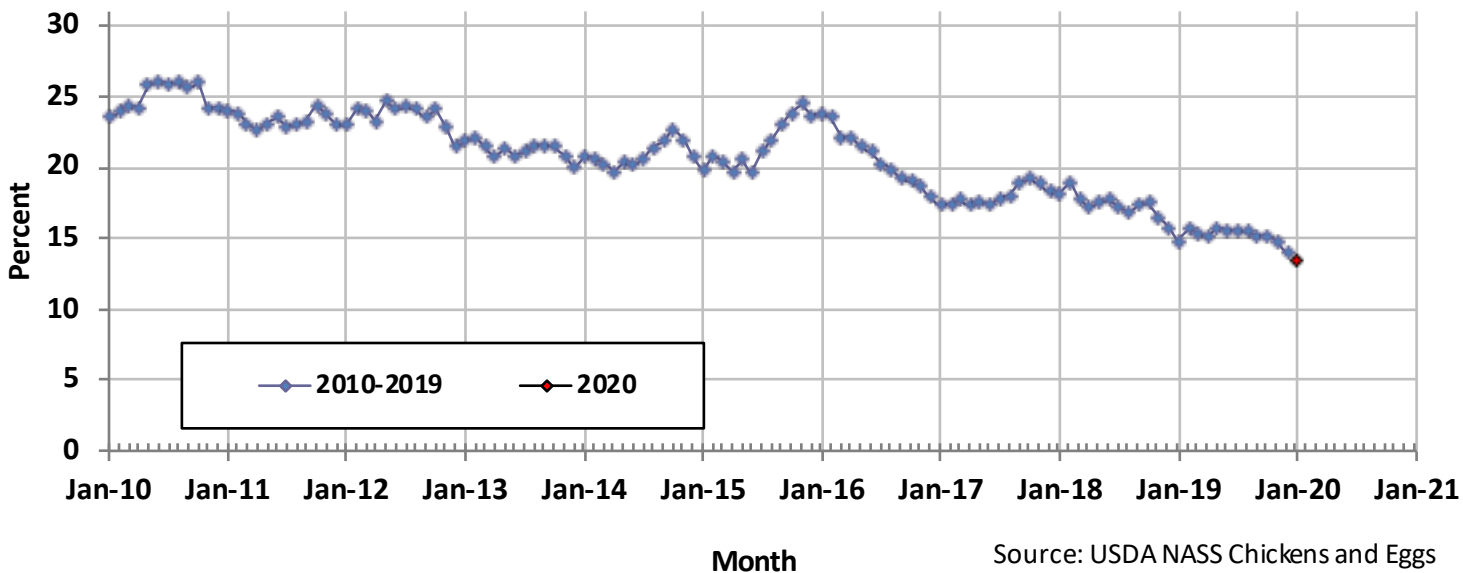
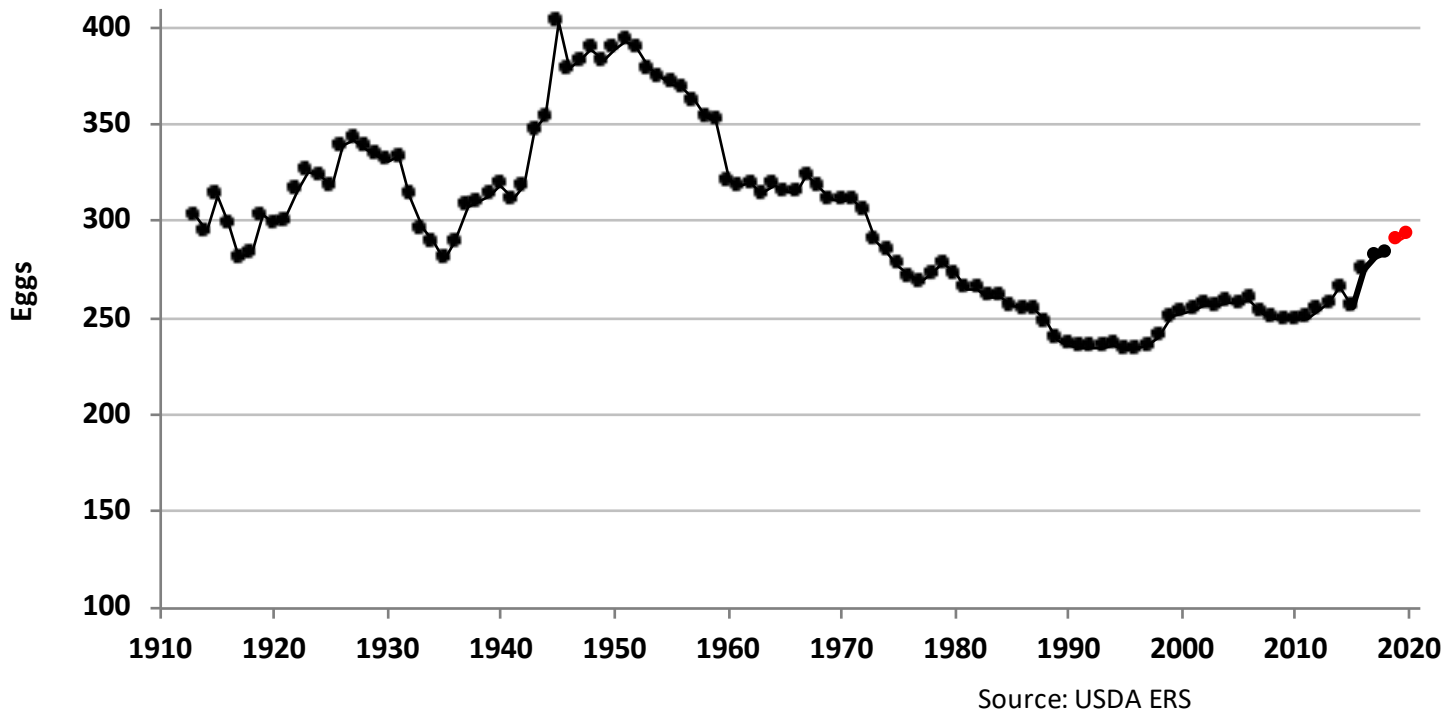


Figure 13: U.S. Per Capita Egg Consumption by Year (1913-2020)



SUMMARY TO DATE

Table 20

		2018	2019	% Change
Hatch of Egg-Type Straight Run (Thousands) (U.S.) (total)	Jan to Dec	52,941	52,667	-0.5
Table-Egg Layers (Millions) (U.S.) (avg.)	Jan to Dec	329.9	335.0	1.6
Table Eggs (Millions/Month) (U.S.) (avg.)	Jan to Dec	7,952	8,214	3.3
Rate of Lay (%)	Jan to Dec	80.4	81.0	0.6
U.S. Table Egg Avg. Cases/Week (Thousands)	Jan to Dec	1,830	1,890	3.3
Avg Monthly Cases of Eggs Broken (Million) (U.S.)	Jan to Dec	6.665	6.895	3.4
		2016	2017	Difference
Percent of U.S. Flock In or Post Molt (avg.)	Jan to Jan 2020	14.8	13.5	-1.3
Average Pullets Added/Month (millions) (U.S.)	Jan to Apr 2020	22.4	21.8	-0.5

Note: U.S. cost of production and egg prices are published in another Egg Industry Center report. Contact Maro Ibarburu at maro@iastate.edu to be placed on the mailing list to receive monthly copies of these reports.

Webpages of some of the sources of information,
Access these sites by clicking on the blue addresses below:

- USDA NASS Chickens and Eggs <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1028>
- USDA NASS Poultry Slaughter <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1131>
- USDA NASS Egg Products <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1057>
- USDA ERS Livestock and Meat Trade Data. <http://www.ers.usda.gov/data/MeatTrade/BroilerTurkeyMonthly.htm>
- USDA FAS <http://www.fas.usda.gov/gats/ExpressQuery1.aspx>
- USDA NASS Cold Storage <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1034>
- USDA AMS Poultry Market News and Analysis <http://marketnews.usda.gov/portal/py>
- USDA AMS Monthly USDA Cage-Free Shell Egg Report <https://www.ams.usda.gov/mnreports/pymcagefree.pdf>

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