

# U.S. Egg Cost of Production and Prices

January 9, 2024



*Compiled by*  
**Maro Ibarburu**

*Sponsored in part by:*



**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.*

REPORT NOTE: This report estimates the average layer feed price and cost of production in six different U.S. regions as outlined on the following map.

This report uses the corn and soybean meal prices reported by [USDA AMS Market News](#).

Monthly corn and soybean prices for each region are estimated as the simple average of prices for the States with pricing information in each region (please see map below)

There is no price information for soybean meal in any of the Northeast States. Therefore, we estimate the soybean meal prices for the Northeast region based on the historical relationship with the Midwest price.

There are no corn or soybean meal prices reported for California

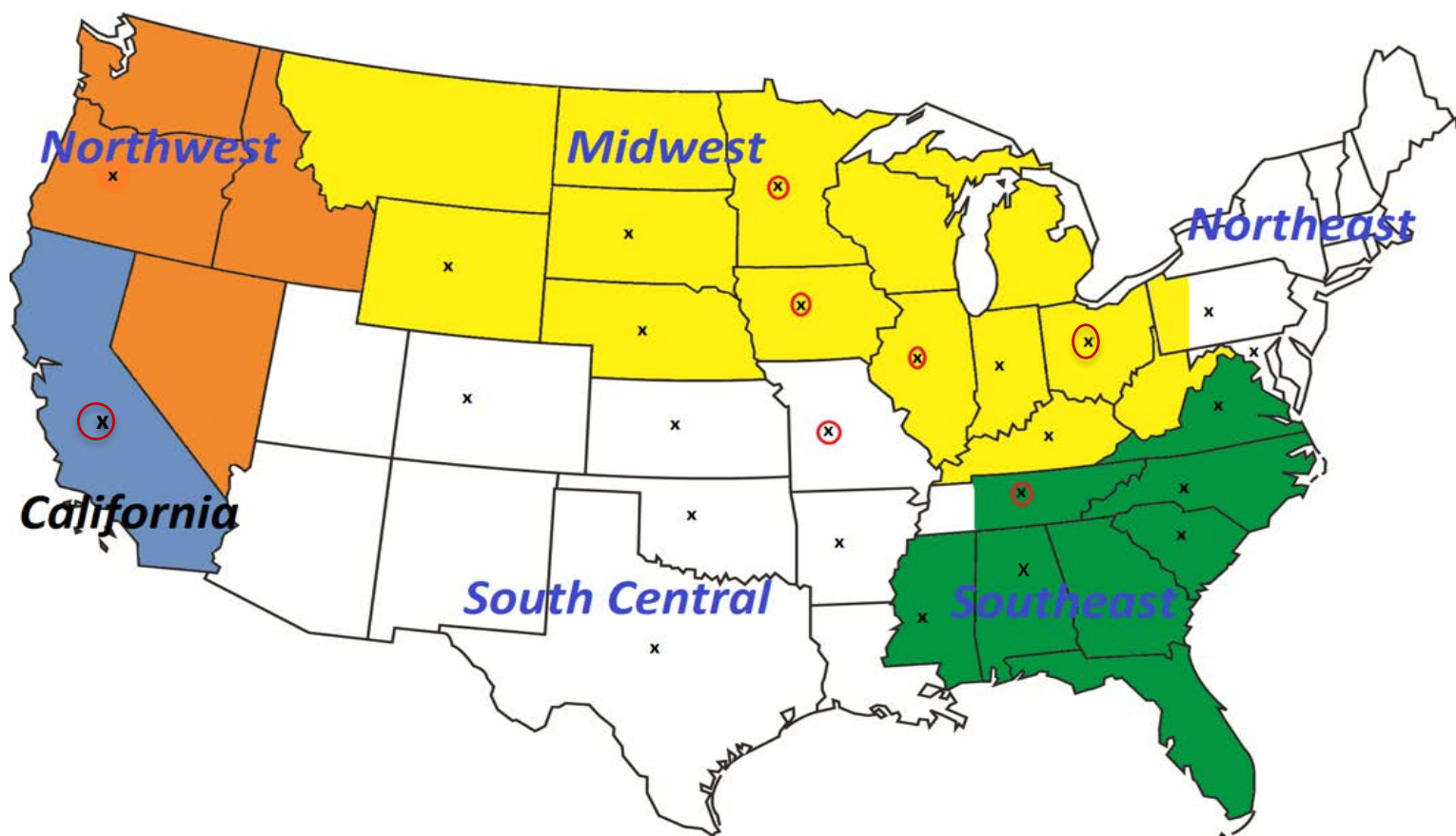
The average feed price is based on a diet consisting of 67% corn, 22% soybean meal, 8% limestone and 3% other ingredients.

The cost of production was adjusted in April 2023 based on producer surveys. There is not enough information to separate costs by region other than using the differences in the feed ingredient prices.

Pullet cost are adjusted by region based on the average feed price for the month, assuming all the other costs are similar between regions.

Feed conversion is assumed to be 3.23 lbs./dozen in conventional systems, based on producers surveys. The labor, building and equipment, interest and miscellaneous costs are assumed to be 27.0 cents/dozen for all regions (except California) and months.

### Map of U.S. Regions and the location of corn and soybean meal price information used in this report



Note: The X's mark the States with monthly corn prices reported by USDA.

The red circles with X's inside (X) mark the States with monthly corn and SBM prices reported by USDA.

**Highlights and comparison with previous month and previous year.  
Prices and Percent Changes**

**Difference with respect to December last year (2023 vs. 2022).**

| Corn Price (\$/ton) |      | SBM Price (\$/ton) |     | Feed Cost (\$/ton) |      | Cost of Prod (cents/doz.) |     | Egg Value (cents/doz.) |      |
|---------------------|------|--------------------|-----|--------------------|------|---------------------------|-----|------------------------|------|
| -72                 | -28% | -12                | -3% | -52                | -17% | +1                        | +1% | -269                   | -61% |

In December, corn prices were \$72/ton (28%) lower than in the previous year. Soybean Meal prices were \$12/ton lower than December last year.

These changes in prices resulted in a \$52/ton (17%) lower cost of feed and a \$1/ton (1%) higher cost of production than December last year.

The December 2023 egg value to producers was 269 cents/dozen (61%) lower than in December 2022.

[The last 12-month average egg value was 51% higher than the 10-year average for the same period.](#)

**Difference with respect to the previous month this year (December vs. November 2023).**

| Corn Price (\$/ton) |     | SBM Price (\$/ton) |     | Feed Cost (\$/ton) |     | Cost of Prod (cents/doz.) |     | Egg Value (cents/doz.) |     |
|---------------------|-----|--------------------|-----|--------------------|-----|---------------------------|-----|------------------------|-----|
| +3                  | +2% | -26                | -5% | -4                 | -1% | -1                        | -1% | +5                     | +3% |

The December corn prices were \$3/ton (2%) higher than the previous month. Soybean Meal prices were \$26/ton (5%) lower.

These changes in prices resulted in a \$4/ton (1%) lower cost of feed and 1 cents/dozen (1%) lower cost of production than last month.

The December egg value to producers was 5 cents/dozen (3%) higher than the previous month.

Note: Many cost of production numbers had been adjusted up based on the surveys received in March and April, 2023. Please see tables footnotes for the new values used.

**CORN PRICE BY REGION (\$/ton) - 2023**

**TABLE 1**

| Month                 | Southeast | Northeast | Midwest | South Central | Northwest | 5-region average |
|-----------------------|-----------|-----------|---------|---------------|-----------|------------------|
| Jan                   | 243.13    | 251.18    | 237.53  | 263.99        | 311.99    | 261.56           |
| Feb                   | 251.12    | 249.17    | 240.81  | 265.66        | 313.20    | 263.99           |
| Mar                   | 239.37    | 239.78    | 229.92  | 251.82        | 301.43    | 252.46           |
| Apr                   | 237.20    | 244.01    | 234.49  | 255.54        | 307.68    | 255.78           |
| May                   | 217.02    | 227.95    | 220.59  | 240.80        | 287.26    | 238.72           |
| Jun                   | 224.23    | 238.09    | 223.95  | 237.51        | 282.69    | 241.29           |
| Jul                   | 200.38    | 212.72    | 200.88  | 208.67        | 264.75    | 217.48           |
| Aug                   | 178.63    | 199.48    | 182.57  | 187.50        | 253.04    | 200.24           |
| Sep                   | 168.23    | 181.21    | 163.68  | 175.78        | 251.76    | 188.13           |
| Oct                   | 169.74    | 179.19    | 162.08  | 174.62        | 245.76    | 186.28           |
| Nov                   | 167.58    | 168.79    | 156.48  | 172.22        | 232.05    | 179.42           |
| Dec                   | 170.41    | 172.43    | 158.55  | 173.75        | 238.24    | 182.68           |
| <b>12 Month Avg.</b>  | 205.59    | 213.67    | 200.96  | 217.32        | 274.15    | 222.34           |
| <b>Region/US avg.</b> | 0.92      | 0.96      | 0.90    | 0.98          | 1.23      |                  |

Source: USDA AMS Marketnews

Note: "5-region average" is the simple average of the NE, SE, SC, MW, and NW regions.

**SOYBEAN MEAL PRICE BY REGION (\$/ton) - 2023**

**TABLE 2**

| Month                 | Southeast | Northeast | Midwest | South Central | Northwest | 5-region average |
|-----------------------|-----------|-----------|---------|---------------|-----------|------------------|
| Jan                   | 516.03    | 519.38    | 482.35  | 482.21        | 564.63    | 512.92           |
| Feb                   | 532.28    | 545.36    | 507.39  | 512.28        | 598.68    | 539.20           |
| Mar                   | 508.47    | 511.12    | 474.39  | 470.25        | 556.27    | 504.10           |
| Apr                   | 480.00    | 484.97    | 449.18  | 445.38        | 527.71    | 477.45           |
| May                   | 448.55    | 449.84    | 415.32  | 413.58        | 490.68    | 443.59           |
| Jun                   | 442.75    | 445.48    | 411.12  | 404.00        | 486.68    | 438.01           |
| Jul                   | 474.77    | 475.90    | 440.45  | 436.78        | 517.67    | 469.11           |
| Aug                   | 464.43    | 469.02    | 433.81  | 433.46        | 511.76    | 462.50           |
| Sep                   | 408.40    | 426.74    | 393.06  | 393.85        | 469.09    | 418.23           |
| Oct                   | 439.60    | 444.94    | 410.60  | 412.10        | 498.04    | 441.06           |
| Nov                   | 475.15    | 499.03    | 462.74  | 467.28        | 560.15    | 492.87           |
| Dec                   | 450.80    | 470.23    | 434.97  | 443.85        | 535.80    | 467.13           |
| <b>12 Month Avg.</b>  | 470.10    | 478.50    | 442.95  | 442.92        | 526.43    | 472.18           |
| <b>Region/US avg.</b> | 1.00      | 1.01      | 0.94    | 0.94          | 1.11      |                  |

Source: USDA AMS Marketnews

There are no reported soybean meal prices for any location in the Northeast region. Therefore, it was approximated using the historical relationship between the Midwest and Northeast prices.

Note: "5-region average" is the simple average of the NE, SE, SC, MW, and NW regions.

ESTIMATED LAYER FEED COST BY REGION (\$/ton) - 2023

TABLE 3

| Month                               | Southeast      | Northeast      | Midwest        | South Central  | Northwest      | 5-region average |
|-------------------------------------|----------------|----------------|----------------|----------------|----------------|------------------|
| Jan                                 | 311.52         | 317.80         | 300.08         | 318.22         | 369.77         | 323.48           |
| Feb                                 | 320.67         | 322.28         | 307.98         | 326.14         | 378.28         | 331.07           |
| Mar                                 | 307.23         | 308.11         | 293.05         | 307.16         | 360.63         | 315.24           |
| Apr                                 | 299.32         | 305.12         | 290.51         | 304.11         | 358.48         | 311.51           |
| May                                 | 278.37         | 286.17         | 273.33         | 286.82         | 336.11         | 292.16           |
| Jun                                 | 282.01         | 292.15         | 274.69         | 282.40         | 332.07         | 292.66           |
| Jul                                 | 272.86         | 281.59         | 265.46         | 269.98         | 326.74         | 283.32           |
| Aug                                 | 255.59         | 270.94         | 251.39         | 254.70         | 317.36         | 269.99           |
| Sep                                 | 235.81         | 248.86         | 229.23         | 237.71         | 306.86         | 251.69           |
| Oct                                 | 243.88         | 251.57         | 232.08         | 241.03         | 309.27         | 255.57           |
| Nov                                 | 250.42         | 256.63         | 240.00         | 251.82         | 313.86         | 262.55           |
| Dec                                 | 246.87         | 252.63         | 235.16         | 247.59         | 312.62         | 258.97           |
| <b>12 Month Avg. Region/US avg.</b> | 275.38<br>0.96 | 282.82<br>0.98 | 266.08<br>0.93 | 277.31<br>0.97 | 335.17<br>1.17 | 287.35           |

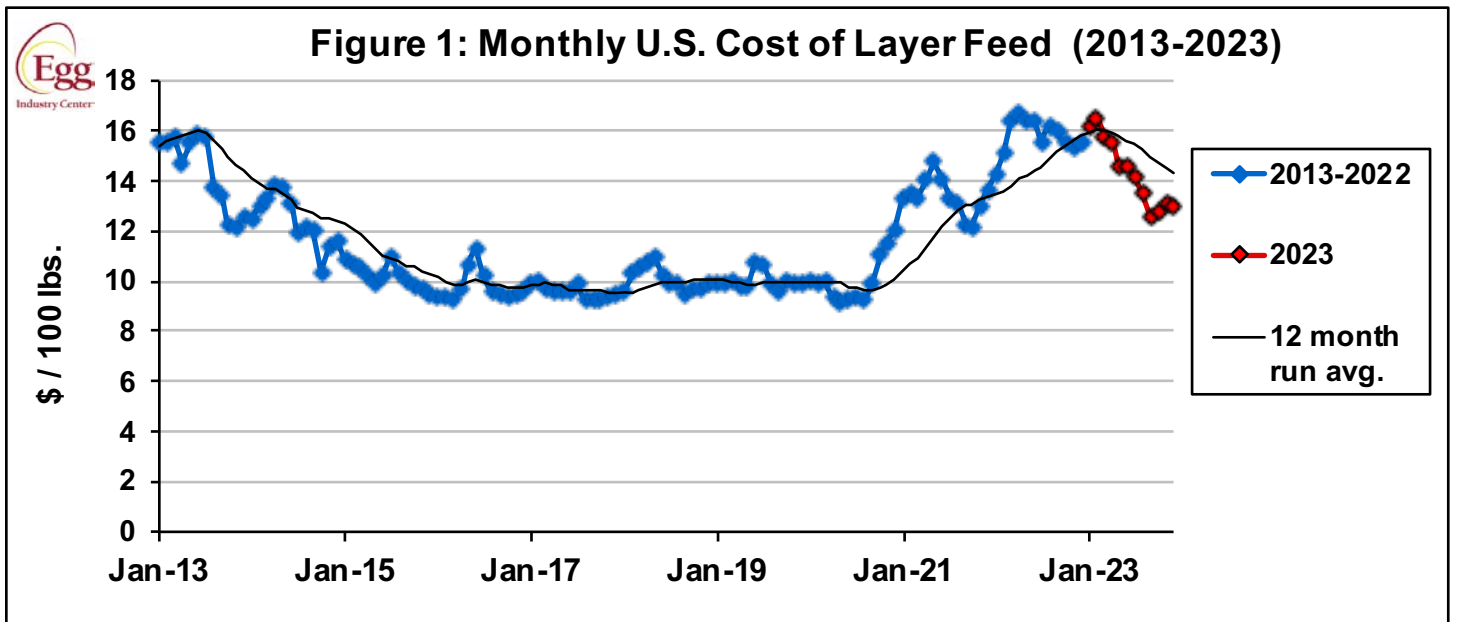
Source: Egg Industry Center. Estimated based on corn and soybean meal prices reported by USDA AMS Marketnews and all other costs as listed in the assumptions below

Assumptions:

|         | Diet Composition |          |          |                    | Milling Cost* | Feed mill mark up<br>(as % of feed ingredients value) | Transportation Cost <sup>^</sup> |
|---------|------------------|----------|----------|--------------------|---------------|---|----------------------------------|
|         | Corn             | SBM      | Calcium* | Other ingredients* |               |   |                                  |
| Percent | 67%              | 22%      | 8%       | 3%                 |               |   |                                  |
| \$/Ton  | variable         | variable | 4.54     | 14.58              | 6.50          | 2.5%  | 2.09                             |

\* These are standardized costs:

<sup>^</sup> Transportation cost assumes \$4.5/mile (\$0.209/ton/mile), and a distance of 10 miles from feed mill to farm Using the current conversion factors (11.7 lbs./pullet, 412 eggs/hen housed, and 3.23 lbs/dozen eggs): the estimated cost of production increases by 0.37 cents/dozen eggs for every 10-mile increase in the transportation



Note: "5-region average" is the simple average of the NE, SE, SC, MW, and NW regions.

TABLE 4

**COST of GROWING CONVENTIONAL PULLETS TO 16 WEEKS of AGE BY REGION (\$/bird) - 2023**

| Month                 | Southeast | Northeast | Midwest | South Central | Northwest | 5-region average |
|-----------------------|-----------|-----------|---------|---------------|-----------|------------------|
| Jan                   | 4.52      | 4.56      | 4.45    | 4.56          | 4.88      | 4.59             |
| Feb                   | 4.58      | 4.59      | 4.50    | 4.61          | 4.94      | 4.64             |
| Mar                   | 4.49      | 4.50      | 4.40    | 4.49          | 4.83      | 4.54             |
| Apr                   | 4.44      | 4.48      | 4.39    | 4.47          | 4.81      | 4.52             |
| May                   | 4.31      | 4.36      | 4.28    | 4.37          | 4.67      | 4.40             |
| Jun                   | 4.34      | 4.40      | 4.29    | 4.34          | 4.65      | 4.40             |
| Jul                   | 4.28      | 4.33      | 4.23    | 4.26          | 4.62      | 4.34             |
| Aug                   | 4.17      | 4.27      | 4.14    | 4.16          | 4.56      | 4.26             |
| Sep                   | 4.05      | 4.13      | 4.00    | 4.06          | 4.49      | 4.15             |
| Oct                   | 4.10      | 4.14      | 4.02    | 4.08          | 4.51      | 4.17             |
| Nov                   | 4.14      | 4.18      | 4.07    | 4.15          | 4.53      | 4.21             |
| Dec                   | 4.12      | 4.15      | 4.04    | 4.12          | 4.53      | 4.19             |
| <b>12 Month Avg.</b>  | 4.29      | 4.34      | 4.24    | 4.31          | 4.67      | 4.37             |
| <b>Region/US avg.</b> | 0.98      | 0.99      | 0.97    | 0.99          | 1.07      |                  |

Source: Egg Industry Center

Non-feed costs had been adjusted based on the COP survey results received during March 2023, and again based on late submitted surveys.

Assumes: estimated as the median value of producers' survey which median age was 16 weeks

- 11.7 lbs. of feed consumed per pullet for conventional systems (from producers' survey)
- pullet feed price 7% more expensive than layers' feed
- chick cost = 107 cents/baby chick for conventional systems (including services)
- moving cost = 18 cents/pullet for conventional systems (from producers' survey)
- all other costs = 132 cents/pullet for conventional systems (from producers' survey)

There was a wide range of costs between survey responses even within the same region

Note: "5-region average" is the simple average of the NE, SE, SC, MW, and NW regions.

TABLE 5

**COST of GROWING CONVENTIONAL PULLETS TO 19 WEEKS of AGE (start of lay) BY REGION (\$/bird) - 2023**

| Month                 | Southeast | Northeast | Midwest | South Central | Northwest | 5-region average |
|-----------------------|-----------|-----------|---------|---------------|-----------|------------------|
| Jan                   | 5.19      | 5.23      | 5.10    | 5.24          | 5.63      | 5.28             |
| Feb                   | 5.26      | 5.27      | 5.16    | 5.30          | 5.69      | 5.34             |
| Mar                   | 5.15      | 5.16      | 5.05    | 5.15          | 5.56      | 5.21             |
| Apr                   | 5.09      | 5.14      | 5.03    | 5.13          | 5.54      | 5.19             |
| May                   | 4.93      | 4.99      | 4.90    | 5.00          | 5.37      | 5.04             |
| Jun                   | 4.96      | 5.04      | 4.91    | 4.97          | 5.34      | 5.04             |
| Jul                   | 4.89      | 4.96      | 4.84    | 4.87          | 5.30      | 4.97             |
| Aug                   | 4.76      | 4.88      | 4.73    | 4.75          | 5.23      | 4.87             |
| Sep                   | 4.61      | 4.71      | 4.56    | 4.63          | 5.15      | 4.73             |
| Oct                   | 4.67      | 4.73      | 4.58    | 4.65          | 5.17      | 4.76             |
| Nov                   | 4.72      | 4.77      | 4.64    | 4.73          | 5.20      | 4.81             |
| Dec                   | 4.70      | 4.74      | 4.61    | 4.70          | 5.19      | 4.79             |
| <b>12 Month Avg.</b>  | 4.91      | 4.97      | 4.84    | 4.93          | 5.37      | 5.00             |
| <b>Region/US avg.</b> | 0.98      | 0.99      | 0.97    | 0.98          | 1.07      |                  |

Source: Egg Industry Center

Non-feed costs had been adjusted based on the COP survey results received during March 2023, and again based on late submitted surveys.

Assumes: 14.2 lbs. of feed consumed per pullet for conventional systems,

- pullet feed price 7% more expensive than layers' feed
- chick cost = 107 cents/baby chick for conventional systems (including services)
- moving cost = 18 cents/pullet for conventional systems
- all other costs = 157 cents/pullet for conventional systems

There was a wide range of costs between survey responses even within the same region

Note: "5-region average" is the simple average of the NE, SE, SC, MW, and NW regions.





TABLE 6

**ESTIMATED CONVENTIONAL PULLET COST BY REGION under 1-cycle systems (Cents/doz.) - 2023**

| Month                 | Southeast | Northeast | Midwest | South Central | Northwest | 5-region average |
|-----------------------|-----------|-----------|---------|---------------|-----------|------------------|
| Jan                   | 13.16     | 13.28     | 12.96   | 13.29         | 14.23     | 13.38            |
| Feb                   | 13.33     | 13.36     | 13.10   | 13.43         | 14.38     | 13.52            |
| Mar                   | 13.09     | 13.10     | 12.83   | 13.09         | 14.06     | 13.23            |
| Apr                   | 12.94     | 13.05     | 12.78   | 13.03         | 14.02     | 13.16            |
| May                   | 12.56     | 12.70     | 12.47   | 12.71         | 13.61     | 12.81            |
| Jun                   | 12.63     | 12.81     | 12.49   | 12.63         | 13.54     | 12.82            |
| Jul                   | 12.46     | 12.62     | 12.33   | 12.41         | 13.44     | 12.65            |
| Aug                   | 12.15     | 12.43     | 12.07   | 12.13         | 13.27     | 12.41            |
| Sep                   | 11.78     | 12.02     | 11.66   | 11.82         | 13.08     | 12.07            |
| Oct                   | 11.93     | 12.07     | 11.72   | 11.88         | 13.12     | 12.14            |
| Nov                   | 12.05     | 12.16     | 11.86   | 12.08         | 13.21     | 12.27            |
| Dec                   | 11.99     | 12.09     | 11.77   | 12.00         | 13.19     | 12.21            |
| <b>12 Month Avg.</b>  | 12.51     | 12.64     | 12.34   | 12.54         | 13.60     | 12.72            |
| <b>Region/US avg.</b> | 0.98      | 0.99      | 0.97    | 0.99          | 1.07      |                  |

Source: Egg Industry Center

Assumes 412 eggs per hen housed under 1-cycle systems for 1-cycle systems up to 90 weeks of age (using producers suveys)

There was a wide range of costs between survey responses even within the same region

TABLE 7

**ESTIMATED FEED COST BY REGION FOR CONVENTIONAL EGGS under 1-cycle systems (Cents/doz.) - 2023**

| Month                 | Southeast | Northeast | Midwest | South Central | Northwest | 5-region average |
|-----------------------|-----------|-----------|---------|---------------|-----------|------------------|
| Jan                   | 50.31     | 51.33     | 48.46   | 51.39         | 59.72     | 52.24            |
| Feb                   | 51.79     | 52.05     | 49.74   | 52.67         | 61.09     | 53.47            |
| Mar                   | 49.62     | 49.76     | 47.33   | 49.61         | 58.24     | 50.91            |
| Apr                   | 48.34     | 49.28     | 46.92   | 49.11         | 57.89     | 50.31            |
| May                   | 44.96     | 46.22     | 44.14   | 46.32         | 54.28     | 47.18            |
| Jun                   | 45.54     | 47.18     | 44.36   | 45.61         | 53.63     | 47.27            |
| Jul                   | 44.07     | 45.48     | 42.87   | 43.60         | 52.77     | 45.76            |
| Aug                   | 41.28     | 43.76     | 40.60   | 41.13         | 51.25     | 43.60            |
| Sep                   | 38.08     | 40.19     | 37.02   | 38.39         | 49.56     | 40.65            |
| Oct                   | 39.39     | 40.63     | 37.48   | 38.93         | 49.95     | 41.27            |
| Nov                   | 40.44     | 41.45     | 38.76   | 40.67         | 50.69     | 42.40            |
| Dec                   | 39.87     | 40.80     | 37.98   | 39.99         | 50.49     | 41.82            |
| <b>12 Month Avg.</b>  | 44.47     | 45.68     | 42.97   | 44.79         | 54.13     | 46.41            |
| <b>Region/US avg.</b> | 0.96      | 0.98      | 0.93    | 0.97          | 1.17      |                  |

Source: Egg Industry Center

Estimated based on feed costs (\$/ton) shown in table 3. Assuming 3.23 lbs. of feed/dozen eggs for 1-cycle systems up to 90 weeks of age (using producers suveys).



TABLE 8

ESTIMATED TOTAL COSTS BY REGION FOR CONVENTIONAL EGGS under 1-cycle systems (cents/doz.) - 2023 \*

| Month                 | Southeast    | Northeast    | Midwest      | South Central | Northwest    | 5-region average |
|-----------------------|--------------|--------------|--------------|---------------|--------------|------------------|
| Jan                   | 90.32        | 91.45        | 88.27        | 91.53         | 100.79       | 92.47            |
| Feb                   | 91.97        | 92.26        | 89.69        | 92.95         | 102.32       | 93.84            |
| Mar                   | 89.55        | 89.71        | 87.01        | 89.54         | 99.15        | 90.99            |
| Apr                   | 88.13        | 89.17        | 86.55        | 88.99         | 98.77        | 90.32            |
| May                   | 84.37        | 85.77        | 83.46        | 85.89         | 94.74        | 86.85            |
| Jun                   | 85.02        | 86.84        | 83.71        | 85.09         | 94.02        | 86.94            |
| Jul                   | 83.38        | 84.95        | 82.05        | 82.86         | 93.06        | 85.26            |
| Aug                   | 80.27        | 83.03        | 79.52        | 80.11         | 91.37        | 82.86            |
| Sep                   | 76.72        | 79.06        | 75.53        | 77.06         | 89.49        | 79.57            |
| Oct                   | 78.17        | 79.55        | 76.05        | 77.66         | 89.92        | 80.27            |
| Nov                   | 79.34        | 80.46        | 77.47        | 79.60         | 90.75        | 81.52            |
| Dec                   | 78.71        | 79.74        | 76.60        | 78.84         | 90.52        | 80.88            |
| <b>12 Month Avg.</b>  | <b>83.83</b> | <b>85.17</b> | <b>82.16</b> | <b>84.18</b>  | <b>94.58</b> | <b>85.98</b>     |
| <b>Region/US avg.</b> | <b>0.97</b>  | <b>0.99</b>  | <b>0.96</b>  | <b>0.98</b>   | <b>1.10</b>  |                  |

Source: Egg Industry Center.

Non-feed costs had been adjusted based on the COP survey results received during March 2023, and again based on late submitted surveys.

\* These estimations are based on feed costs (cents/dozen) shown in table 7, pullet costs (cents/dozen) shown in table 6.

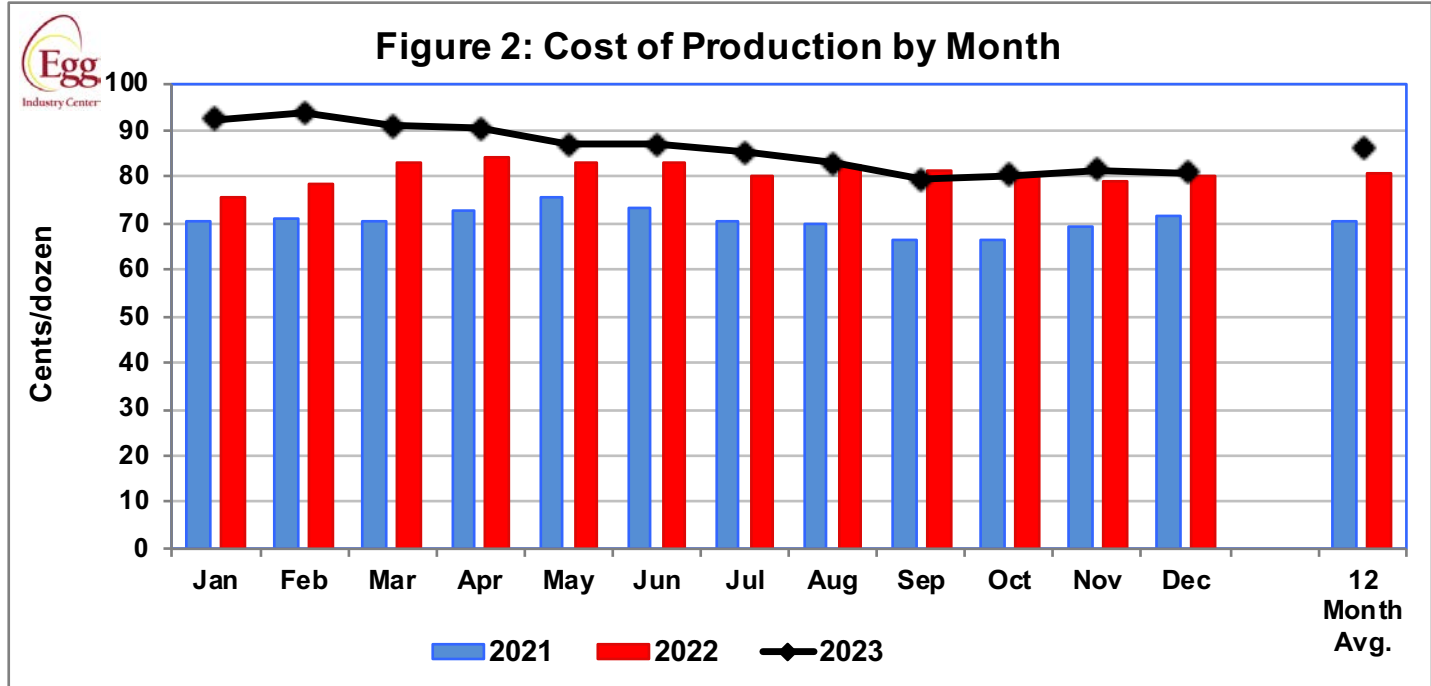
Building and equipment, labor, interest and miscellaneous costs are assumed to be 27 cents/dozen eggs

There was a wide range of production costs between survey responses even within the same region

These estimations are based on standard costs for conventionally produced eggs. Higher labor costs might exist in certain regions.

Newer, more efficient farms, would probably use less labor but have higher equipment costs.

The cost of production for California are not estimated because the California regulations make the costs very different than conventionally produced eggs.



Note: "5-Region average" is the simple average of the NE, SE, SC, MW, and NE regions. California is not considered for the average because of the different production requirements.



U.S. ESTIMATED FARM EGG PRICE AND RETAIL EGG PRICE (cents/Doz)

TABLE 9

| month                | Farm Value for All White Egg Sizes (cents/Doz) |       |       |        | Retail Price for Large White Eggs (cents/Doz) |       |       |        |
|----------------------|--|-------|-------|--------|---|-------|-------|--------|
|                      | 2021   | 2022  | 2023  | Change | 2021  | 2022  | 2023  | Change |
| Jan                  | 72.8   | 108.3 | 326.4 | 218.1  | 146.6   | 192.9 | 482.3 | 289.4  |
| Feb                  | 93.3   | 135.2 | 213.8 | 78.5   | 159.7   | 200.5 | 421.1 | 220.6  |
| Mar                  | 104.0  | 158.5 | 274.1 | 115.5  | 162.5   | 204.6 | 344.6 | 140.0  |
| Apr                  | 67.8   | 235.9 | 138.1 | -97.9  | 162.0   | 252.0 | 327.0 | 75.0   |
| May                  | 59.5   | 208.9 | 60.3  | -148.6 | 162.5   | 286.3 | 266.6 | -19.7  |
| Jun                  | 58.0   | 191.1 | 82.3  | -108.8 | 164.2   | 270.7 | 221.9 | -48.8  |
| Jul                  | 73.2   | 271.0 | 82.9  | -188.1 | 164.2   | 293.6 | 209.4 | -84.2  |
| Aug                  | 93.6   | 190.6 | 99.4  | -91.2  | 170.9   | 311.6 | 204.3 | -107.3 |
| Sep                  | 97.6   | 269.8 | 100.4 | -169.4 | 183.5   | 290.2 | 206.5 | -83.7  |
| Oct                  | 77.7   | 284.4 | 89.0  | -195.4 | 182.1   | 341.9 | 207.2 | -134.7 |
| Nov                  | 90.6   | 340.1 | 165.1 | -175.0 | 171.8   | 358.9 | 213.8 | -145.1 |
| Dec                  | 123.6  | 439.1 | 170.4 | -268.7 | 178.8   | 425.0 |       |        |
| <b>Avg.</b>          | 84.3   | 236.1 | 150.2 | -85.9  | 166.4   | 273.0 | 282.2 | 9.2    |
| <b>12 Month Avg.</b> | 84.3   | 236.1 |       |        | 167.4   | 285.7 |       |        |

Source: Estimated using Urner Barry's price quotations by regions

Source: Bureau of Labor Statistics (Dept. of Commerce)

For this report, the value to producers for each size eggs is estimated by subtracting an "adjustment factor" from Urner Barry quotations of prices by region. The "adjustment factor" starting on July 2022 is 46.83 cents/dozen and it is estimated as the sum of the following costs estimated in the PCT study published in June 2022: carton cost + case cost + finishing cost + processing cost + cost of delivering to store door + loss from store returns

The average price of all eggs is estimated using estimated the proportions of Jumbo, Extra-large, Large, Medium, Small and Undergrades. These proportions are the estimated using the weighted average of the reponses to the August 2021 PCT study and the June 2022 PCT study.

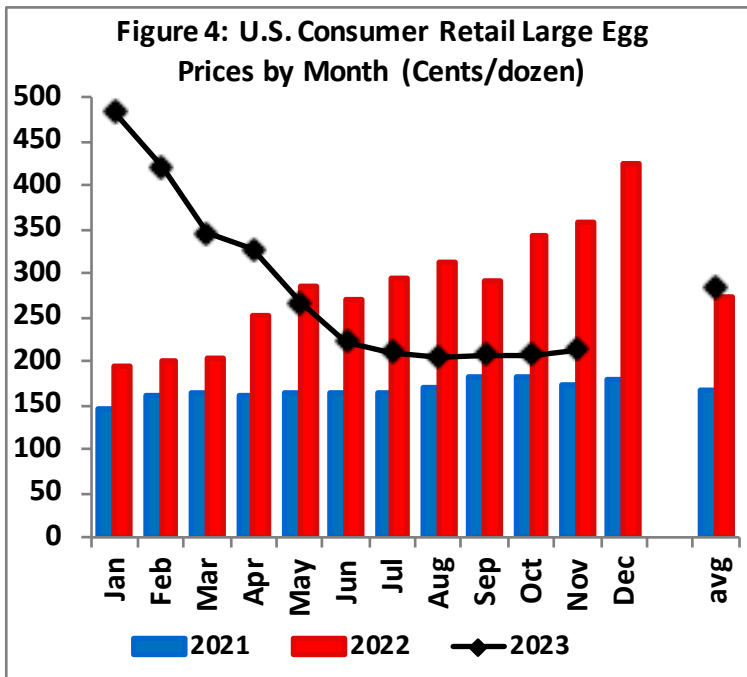
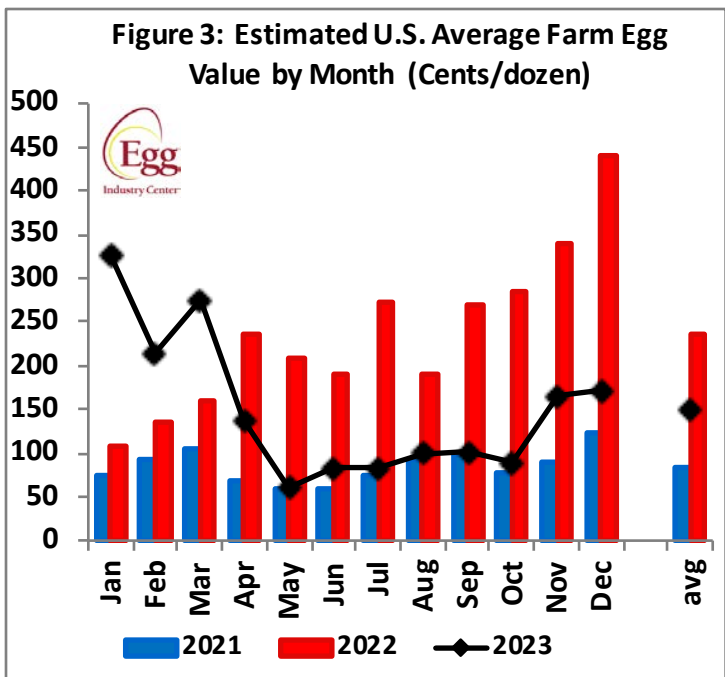


TABLE 10

ESTIMATED TOTAL COSTS OF CONVENTIONAL PRODUCTION vs. some loss in production efficiency (Cents/doz.) - 2023

| month                | Average      | 5% higher feed conv.<br>A | 5% higher pullet feed<br>B | TOTAL Cost (cents/dozen) |              | A and B      | A, B, and C  | A, B, and D  |
|----------------------|--------------|---------------------------|----------------------------|--------------------------|--------------|--------------|--------------|--------------|
|                      |              |                           |                            | Lower eggs/ hen housed   |              |              |              |              |
|                      |              |                           |                            | C                        | D            |              |              |              |
| Jan                  | 92.47        | 95.09                     | 92.77                      | 94.52                    | 95.86        | 95.38        | 96.10        | 97.44        |
| Feb                  | 93.84        | 96.51                     | 94.14                      | 95.89                    | 97.24        | 96.81        | 97.54        | 98.88        |
| Mar                  | 90.99        | 93.54                     | 91.28                      | 93.03                    | 94.37        | 93.83        | 94.54        | 95.88        |
| Apr                  | 90.32        | 92.84                     | 90.61                      | 92.36                    | 93.70        | 93.12        | 93.83        | 95.17        |
| May                  | 86.85        | 89.20                     | 87.11                      | 88.86                    | 90.20        | 89.47        | 90.16        | 91.50        |
| Jun                  | 86.94        | 89.30                     | 87.20                      | 88.95                    | 90.30        | 89.57        | 90.26        | 91.60        |
| Jul                  | 85.26        | 87.55                     | 85.52                      | 87.27                    | 88.61        | 87.80        | 88.48        | 89.83        |
| Aug                  | 82.86        | 85.04                     | 83.11                      | 84.86                    | 86.20        | 85.29        | 85.95        | 87.30        |
| Sep                  | 79.57        | 81.60                     | 79.80                      | 81.55                    | 82.89        | 81.83        | 82.48        | 83.82        |
| Oct                  | 80.27        | 82.33                     | 80.50                      | 82.25                    | 83.59        | 82.57        | 83.22        | 84.56        |
| Nov                  | 81.52        | 83.64                     | 81.76                      | 83.51                    | 84.85        | 83.88        | 84.54        | 85.88        |
| Dec                  | 80.88        | 82.97                     | 81.12                      | 82.87                    | 84.21        | 83.21        | 83.86        | 85.21        |
| <b>12 Month Avg.</b> | <b>85.98</b> | <b>88.30</b>              | <b>86.24</b>               | <b>87.99</b>             | <b>89.34</b> | <b>88.56</b> | <b>89.25</b> | <b>90.59</b> |

Source: Egg Industry Center, based on USDA Marketnews published prices of corn and soybean meal

"Average" is estimated using the producers surveys results for 17 to 90 weeks of age.

"5% higher feed conv." is the estimated cost if the feed conversion were 5% higher than the survey results (using 3.39 lbs./dozen instead of 3.23 lbs./dozen)

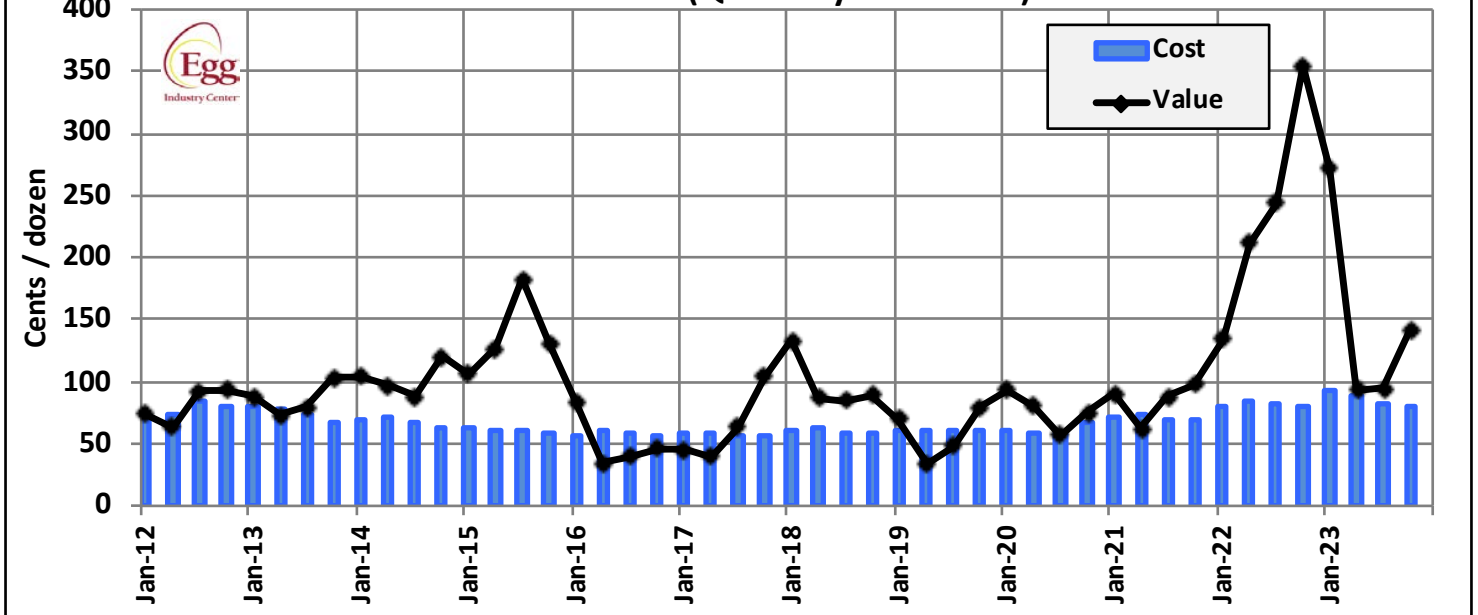
"5% higher pullet feed." is the estimated cost if the feed used to grow pullets were 5% higher than the survey results (using 12.3 lbs./pullet instead of 11.7 lbs./pullet)

"lower eggs/ hen housed" is the estimated cost if the number of eggs per hen-housed were 5% lower than the survey results (using 391 eggs/hen-housed instead of 412 eggs/hen-housed):

C = the effect of producing less eggs per hen housed as a result of shortening the laying period was estimated as depreciating the cost of growing the pullet in less eggs

D = the effect of producing less eggs per hen housed as a result of a lower hen-day production but keeping the length of the period equal was estimated as D plus the effect on the non-feed costs (assuming that the non-feed costs increase at the same proportion as the productivity decrease)

Figure 5: Estimated Cost of Production and Producer Non-Processed Egg Value in U.S. (Quarterly 2012-2023)

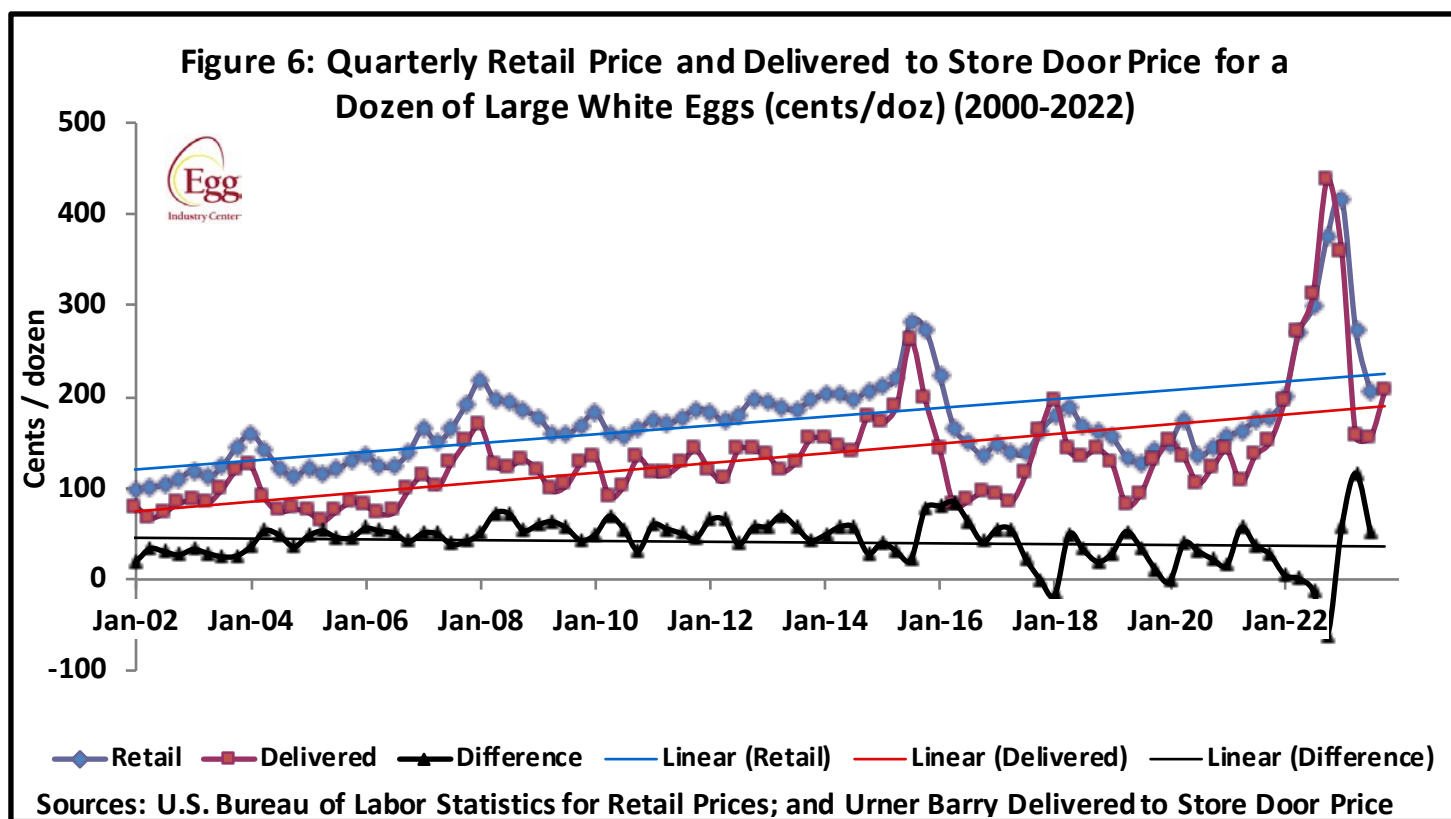


CONVENTIONAL LARGE WHITE SHELL EGGS PRICES TO WAREHOUSES (dollars per dozen)

TABLE 11

| month         | Northeast |      | Southeast |      | Midwest |      | South Central |      |
|---------------|-----------|------|-----------|------|---------|------|---------------|------|
|               | 2022      | 2023 | 2022      | 2023 | 2022    | 2023 | 2022          | 2023 |
| Jan           | 1.35      | 4.12 | 1.45      | 4.22 | 1.28    | 4.08 | 1.46          | 4.27 |
| Feb           | 1.71      | 2.52 | 1.80      | 2.61 | 1.63    | 2.48 | 1.82          | 2.67 |
| Mar           | 1.62      | 3.02 | 1.72      | 3.11 | 1.55    | 2.97 | 1.74          | 3.16 |
| Apr           | 2.67      | 2.15 | 2.76      | 2.15 | 2.59    | 2.09 | 2.78          | 2.25 |
| May           | 2.47      | 0.92 | 2.55      | 0.96 | 2.38    | 0.86 | 2.57          | 1.00 |
| Jun           | 2.17      | 1.16 | 2.21      | 1.21 | 2.05    | 1.11 | 2.23          | 1.25 |
| Jul           | 3.14      | 1.16 | 3.20      | 1.21 | 3.05    | 1.11 | 3.25          | 1.25 |
| Aug           | 2.44      | 1.28 | 2.51      | 1.32 | 2.35    | 1.22 | 2.55          | 1.36 |
| Sep           | 2.75      | 1.43 | 2.81      | 1.50 | 2.66    | 1.38 | 2.86          | 1.54 |
| Oct           | 3.37      | 1.21 | 3.41      | 1.27 | 3.28    | 1.16 | 3.50          | 1.32 |
| Nov           | 3.76      | 1.91 | 3.84      | 1.99 | 3.68    | 1.86 | 3.88          | 2.02 |
| Dec           | 4.78      | 1.95 | 4.88      | 2.04 | 4.73    | 1.90 | 4.92          | 2.06 |
| 12 Month Avg. | 2.69      | 1.90 | 2.76      | 1.96 | 2.60    | 1.85 | 2.80          | 2.01 |
| 12 Month Avg. | 2.69      | 1.90 | 2.76      | 1.96 | 2.60    | 1.85 | 2.80          | 2.01 |

Source: USDA AMS Poultry Market News



Note: the delivered to store door price is estimated from the Urner Barry quoted prices as the 5-region simple average (Northeast, Southeast, South Central, Midwest, and Northwest). California is not considered for the average because of the different production requirements.

**CAGE-FREE LARGE SHELL EGGS PRICES TO FIRST RECEIVERS (dollars per dozen)**

**TABLE 12**

| month                | Contract Pricing, Carton |             |             |             | Negotiated Pricing, Loose |             |             |             |
|----------------------|--------------------------|-------------|-------------|-------------|---------------------------|-------------|-------------|-------------|
|                      | 2020                     | 2021        | 2022        | 2023        | 2020                      | 2021        | 2022        | 2023        |
| Jan                  | 1.53                     | 1.60        | 1.64        | 1.64        | 0.81                      | 1.93        | 2.10        | 4.97        |
| Feb                  | 1.53                     | 1.60        | 1.64        | 1.64        | 0.86                      | 1.78        | 1.38        | 4.02        |
| Mar                  | 1.53                     | 1.60        | 1.64        | 1.68        | 1.48                      | 1.69        | 1.69        | 3.34        |
| Apr                  | 1.53                     | 1.60        | 1.64        | 1.68        | 1.26                      | 0.77        | 2.31        | 1.07        |
| May                  | 1.53                     | 1.60        | 1.64        | 1.68        | 1.62                      | 0.80        | 2.22        | 0.97        |
| Jun                  | 1.53                     | 1.60        | 1.64        | 1.68        | 1.00                      | 0.67        | 1.76        | 1.55        |
| Jul                  | 1.53                     | 1.60        | 1.64        | 1.68        | 0.80                      | *           | 2.76        | 1.20        |
| Aug                  | 1.51                     | 1.60        | 1.64        | 1.68        | 0.97                      | 1.00        | 2.36        | 1.34        |
| Sep                  | 1.51                     | 1.64        | 1.64        | 1.68        | 1.12                      | 0.99        | 3.35        | 1.20        |
| Oct                  | 1.51                     | 1.64        | 1.64        | 1.68        | 1.12                      | 0.96        | 3.93        | 1.23        |
| Nov                  | 1.51                     | 1.64        | 1.64        | 1.68        | 1.42                      | 1.53        | 3.85        | 2.28        |
| Dec                  | 1.51                     | 1.64        | 1.64        | 1.68        | 1.38                      | 1.69        | 5.51        | 2.87        |
| <b>Jan-Jun Avg.</b>  | <b>1.53</b>              | <b>1.60</b> | <b>1.64</b> | <b>1.67</b> | <b>1.17</b>               | <b>1.27</b> | <b>1.91</b> | <b>2.65</b> |
| <b>12 Month Avg.</b> | <b>1.52</b>              | <b>1.61</b> | <b>1.64</b> |             | <b>1.15</b>               | <b>1.26</b> | <b>2.77</b> |             |

Notes: the Cage-Free price includes pricing for both white and brown cage-free eggs  
 cage-free contracting price is cartoned while cage-free negotiated price is loose  
 \* price not reported for this month

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

**BREAKING STOCK AND CHECKS EGGS PRICES IN CENTRAL STATES (cents per dozen)**

**TABLE 13**

| month                | Breaking Stock |              |               |               | Checks Eggs  |              |               |               |
|----------------------|----------------|--------------|---------------|---------------|--------------|--------------|---------------|---------------|
|                      | 2020           | 2021         | 2022          | 2023          | 2020         | 2021         | 2022          | 2023          |
| Jan                  | 26.17          | 34.24        | 74.30         | 253.25        | 13.36        | 28.55        | 65.60         | 237.28        |
| Feb                  | 27.18          | 43.32        | 81.13         | 198.84        | 15.26        | 36.84        | 72.58         | 186.37        |
| Mar                  | 58.91          | 66.07        | 122.80        | 267.39        | 48.00        | 58.39        | 114.04        | 250.96        |
| Apr                  | 26.89          | 56.36        | 232.31        | 143.35        | 17.00        | 46.23        | 227.33        | 136.70        |
| May                  | 25.88          | 51.08        | 207.93        | 44.39         | 16.80        | 41.65        | 208.95        | 37.91         |
| Jun                  | 34.68          | 48.02        | 178.52        | 74.31         | 25.00        | 41.32        | 170.86        | 67.48         |
| Jul                  | 29.32          | 47.76        | 221.25        | 86.33         | 20.18        | 41.00        | 215.30        | 79.00         |
| Aug                  | 34.93          | 58.86        | 171.37        | 85.93         | 25.19        | 53.59        | 166.17        | 79.22         |
| Sep                  | 46.31          | 65.45        | 208.67        | 86.33         | 39.95        | 58.76        | 204.05        | 80.80         |
| Oct                  | 70.60          | 60.45        | 259.85        | 80.55         | 62.10        | 50.80        | 247.55        | 77.10         |
| Nov                  | 67.03          | 61.80        | 259.85        | 107.73        | 60.32        | 50.55        | 254.25        | 101.35        |
| Dec                  | 39.19          | 68.12        | 346.71        | 111.50        | 29.69        | 64.05        | 329.21        | 105.00        |
| <b>12 Month Avg.</b> | <b>40.59</b>   | <b>55.13</b> | <b>197.06</b> | <b>128.32</b> | <b>31.07</b> | <b>47.64</b> | <b>189.66</b> | <b>119.93</b> |
| <b>12 Month Avg.</b> | <b>40.59</b>   | <b>55.13</b> | <b>197.06</b> |               | <b>31.07</b> | <b>47.64</b> | <b>189.66</b> |               |

Source: USDA AMS Poultry Market News



**TABLE 12: U.S. CORN AND SOYBEAN PLANTINGS, HARVEST, AND UTILIZATION (2019 to 2023)**

| Year               | Corn                    |                         |  | Soybeans                |                         |  |
|--------------------|-------------------------|-------------------------|--|-------------------------|-------------------------|--|
|                    | Planted (Million acres) | Harvest (Million acres) | Production Harvested (Million bushels) | Planted (Million acres) | Harvest (Million acres) | Production Harvested (Million bushels) |
| 2019/20            | 89.7                    | 81.3                    | 14,111                                 | 76.1                    | 74.9                    | 3,552                                  |
| 2020/21            | 90.7                    | 82.3                    | 15,074                                 | 83.4                    | 82.6                    | 4,216                                  |
| 2021/22            | 93.3                    | 85.3                    | 13,730                                 | 87.2                    | 86.3                    | 4,465                                  |
| 2022/23            | 88.6                    | 79.2                    | 13,715                                 | 87.5                    | 86.3                    | 4,270                                  |
| <b>Projections</b> | <b>Projections</b>      |                         |  | <b>Projections</b>      |                         |  |
| <b>2023/24+</b>    | 94.9                    | 87.1                    | 15,234                                 | 83.6                    | 82.8                    | 4,129                                  |

| Utilization of Soybean for Various Purposes (Million bushels) |               |            |         |              |       |                      |                  |         |         |               |               |
|---|---------------|------------|---------|--------------|-------|----------------------|------------------|---------|---------|---------------|---------------|
| Year  | Begin. Stocks | Production | Imports | Total Supply | Crush | Seed Feed & residual | % Crush of total | Exports | Net Use | Ending Stocks | Price (\$/bu) |
| 2019/20   | 909           | 3,552      | 15      | 4,476        | 2,165 | 97                   | 47.4             | 1,679   | 3,952   | 525           | 8.57          |
| 2020/21   | 525           | 4,216      | 20      | 4,761        | 2,141 | 101                  | 46.6             | 2,266   | 4,504   | 257           | 10.80         |
| 2021/22   | 257           | 4,465      | 16      | 4,738        | 2,204 | 102                  | 47.1             | 2,152   | 4,464   | 274           | 13.30         |
| 2022/23   | 274           | 4,270      | 25      | 4,569        | 2,212 | 97                   | 48.6             | 1,992   | 4,301   | 268           | 14.20         |
| 2023/24+  | 268           | 4,129      | 30      | 4,428        | 2,300 | 101                  | 51.9             | 1,755   | 4,182   | 245           | 12.90         |

| Utilization of Corn for Various Purposes (Million bushels) |               |            |         |              |       |          |                   |         |         |               |               |
|--|---------------|------------|---------|--------------|-------|----------|-------------------|---------|---------|---------------|---------------|
| Year   | Begin. Stocks | Production | Imports | Total Supply | Feed  | (Fuel) * | Food & Industrial | Exports | Net Use | Ending Stocks | Price (\$/bu) |
| 2019/20  | 2,221         | 13,620     | 42      | 15,883       | 5,900 | 4,857    | 6,286             | 1,777   | 13,963  | 1,919         | 3.56          |
| 2020/21  | 1,919         | 14,111     | 24      | 16,055       | 5,607 | 5,028    | 6,467             | 2,747   | 14,821  | 1,235         | 4.53          |
| 2021/22  | 1,235         | 15,074     | 24      | 16,333       | 5,726 | 5,320    | 6,757             | 2,472   | 14,956  | 1,377         | 6.00          |
| 2022/23  | 1,377         | 13,715     | 39      | 15,130       | 5,549 | 5,176    | 6,558             | 1,661   | 13,769  | 1,361         | 6.54          |
| 2023/24+   | 1,361         | 15,234     | 25      | 16,621       | 5,650 | 5,325    | 6,740             | 2,100   | 14,490  | 2,131         | 4.85          |

+ (forecast December 2023) \* Fuel is included in the "Food and Industrial" category

|          | Feed  | Fuel  | Food & Industrial * | Exports | Ending Stocks |
|----------|-------|-------|---------------------|---------|---------------|
| 2019/20  | 37.1% | 30.6% | 9.0%                | 11.2%   | 12.1%         |
| 2020/21  | 34.9% | 31.3% | 9.0%                | 17.1%   | 7.7%          |
| 2021/22  | 35.1% | 32.6% | 8.8%                | 15.1%   | 8.4%          |
| 2022/23  | 36.7% | 34.2% | 9.1%                | 11.0%   | 9.0%          |
| 2023/24+ | 34.0% | 32.0% | 8.5%                | 12.6%   | 12.8%         |

\* excluding the use for fuel

**Sources Acknowledgements** (double click on the links below and you can go directly to the source):

- USDA AMS Market News [https://mymarketnews.ams.usda.gov/public\\_data](https://mymarketnews.ams.usda.gov/public_data)
- <https://www.marketnews.usda.gov/mnp/ls-report-config?category=Feedstuff>
- USDA WASDE <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1273>
- Urner Barry <http://www.ubcomtell.com/>
- Bureau of Labor Statistics [https://www.bls.gov/regions/mid-atlantic/data/AverageRetailFoodAndEnergyPrices\\_USandMidwest\\_Table.htm](https://www.bls.gov/regions/mid-atlantic/data/AverageRetailFoodAndEnergyPrices_USandMidwest_Table.htm)
- USDA Cage-Free Shell Egg Report <https://www.ams.usda.gov/mnreports/pymcagefree.pdf>

Maro Ibarburu, EIC Business Analyst  
 Iowa State University, Ames, IA  
 Phone (515) 294-8132  
 E-mail: [maro@iastate.edu](mailto:maro@iastate.edu)



ADVANCING A THRIVING INDUSTRY  
<https://www.eggindustrycenter.org/>