

Don Bell's Table Egg Layer Flock Projections and Economic Commentary - 2003

(This report was written by Don Bell, University of California Poultry Specialist, emeritus, under the sponsorship of United Egg Producers)

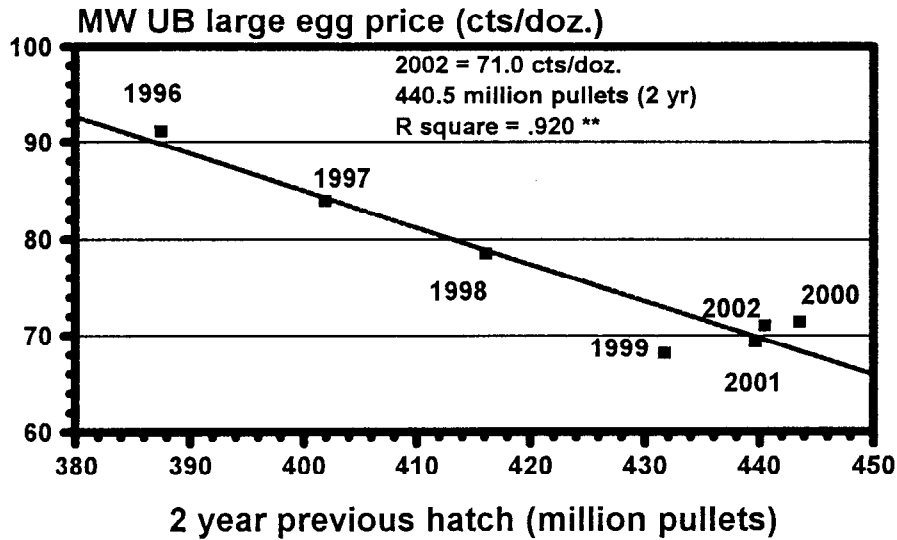
U.S. Egg Price Projections

Egg price projections are necessary for budgeting purposes. No one likes to do them and no one has a monopoly on year to year accuracy. In simple words, there's just too many things that can happen within a year's time to alter projection results. Most of us who work with this subject can only be guided by past relationships. We're really not mind readers as to when a weather problem might occur, when an export order for eggs will be obtained or when or how severe the next outbreak of a disease epidemic will be - they just do and our projections will have to "step aside" and let prices change beyond the levels originally estimated - up or down.

Simply stated, projections look at industry statistics and attempt to correlate change in one or more factors with resulting changes in price. We also recognize certain long term relationships in demand associated with the time of the year - even though this pattern of prices also changes. In principle, we must factor in variations in prices ranging from 70-75% of the annual average to 110 -120%. This has nothing to do with the size of the nation's flock - on the contrary, the highest prices are associated with the largest flock size. This relationship is strictly one of changes in the demand for eggs on a seasonal basis.

Price predictions using data from the last 4 years would result in practically nothing since annual prices during this period have changed only very little - about 4 cents per dozen. We've used a little broader base of 7 years (1996-2002) for our current projections. This provides us with a more sensitive response when factors are compared. One can look at various factors such as hen numbers, previous hatch periods (12, 18, 24 months), hens vs human population, percentage changes, etc. Our experience with using different factors to predict egg prices indicates that the previous 24 month hatch is highly related to next year's egg prices. For example, 5 to 10 years of previous 24 month hatch totals were compared and it was found that 7 years of data (1996-2002) gave us the highest relationship to actual egg prices the following year. Variations in hatch numbers accounted for 91.9% (MW UB large egg prices) and 96.7% (California large farm egg prices). These are very high correlations considering all the other factors that could play an important role. See Figure 1

**Figure 1. Two Year Previous Hatch
vs Current Year Farm Egg Prices**



Based upon 1996 to 2002 data

In December of 2001, this technique was used to predict 2002 egg prices. Even though the monthly pattern was slightly off - as the result of short term events in the market-place, the overall projection was only 0.3 cent/dozen below real prices. Table 1 lists these figures for 2002.

Table 1. Comparison of Projected vs Real Egg Prices (MW.UB white, large) - 2002

Month	Projected	Real	Month	Projected	Real
Jan	75.6	74.7	July	67.6	67.6
Feb	70.9	66.2	Aug	67.7	70.8
Mar	74.9	82.0	Sept	68.3	67.4
Apr	68.0	60.5	Oct	69.2	69.3
May	60.0	58.2	Nov	78.9	88.0
June	62.4	70.3	Dec	78.1	79.7
			Average	70.2	70.5

As the hatch changes, the 24 month accumulated hatch can change up or down depending upon whether or not the latest addition of chicks is more or less than the number they replace from the 24 month earlier hatch. For example, the pullet chicks hatched in December of 2002 (16.08 million) were 1.27 million fewer than in December 2000 (17.35 million) even though they were more than December a year ago 15.83 million). If one stops to think about it, the current hatch should be compared to the hatch 2 years previously since those are the birds that are being replaced thus having a direct effect on the ultimate flock size.

Short and Long Term Factors Affecting Price

As programs to reduce hen density in the laying house come into play, chicks hatched for the reduced density will also have to be reduced and this will be reflected in the 24 month totals and the relationship it has (or will have) with egg prices. These will cause long term adjustments in chick hatch/egg price relationships and this will be looked at annually.

Short term factors which temporarily affect the market, such as a large export order or a weather problem affecting egg production, egg size, and/or mortality, generally affect the market for only a few weeks. These spikes in prices are totally unpredictable and should be considered a "wind-fall" for the industry.

A major disease problem in one or more regions of the country, on the other hand, could have a much longer effect on prices. California's current problem with Exotic Newcastle Disease (END) has resulted in the loss of 3 million layers - a major effect on local supplies and a 1+% reduction in national egg supplies. Additional surplus eggs from the Midwest will find their way to California to replenish its supplies. This should remove some of the pressure on egg prices through-out the country. Because re-population will take time, such effects are more drawn out.

Where Does This Leave Us for 2003?

Between December of 2001 and December of 2002, the 24 month hatch has come down by 1.1% (almost 5 million chicks). This has resulted in an increase in the egg price projection for 2003 (71.8 cents/dozen) over 2002 (70.2 cents/dozen). By February, the 12 month projection had climbed to 72.4 cents/dozen as a result of the further reduction in the total hatch. Note, that this does not factor in the recent export order or the effects of the END problem in California.

Table 2 summarizes the beginning year projections for 2003 for three classes of eggs for the Midwest region. These data are to be used for comparison purposes only and do not represent anything other than the author's best judgement. Please review the earlier sections regarding factors which can affect the outcome of these projections.

Table 2. Estimated Umer Barry Egg Prices for the Midwest Region - (2003)
 (Large white, Central breaking stock- 48-50 lb, gradable nest run - MW Class 1) (est. In January 2003)

Month	Large White	Adjust.(-)	Breakers	Adjust (+)	GNR
Jan	77.6	-42.0	35.6	+11.0	46.6
Feb	71.9	-37.2	34.7	+8.0	42.7
Mar	78.3	-43.3	35.0	+13.4	48.4
Apr	68.7	-38.8	29.9	+8.1	38.0
May	59.8	-33.1	26.7	+3.7	33.1
June	65.6	-34.7	30.9	+4.8	35.7
July	68.7	-35.0	33.7	+5.3	39.0
Aug	71.9	-36.4	35.5	+5.6	41.1
Sept	68.0	-34.7	33.3	+4.0	37.3
Oct	71.6	-34.6	37.0	+3.9	40.9
Nov	80.7	-42.7	38.0	+8.5	46.5
Dec.	79.9	-48.2	31.7	+13.5	45.2
Avg	71.8	-38.3	33.5	+7.7	41.2

Note: The adjustments needed between types of eggs has changed over the 7 years of the current data base (see Table 3), therefore, the above adjustments are based upon only the average monthly differences observed in 2000, 2001 and 2002.

Table 3: Changes Between Classes During the Last 7 years.

Year	Large minus breaker		Large minus GNR		GNR minus breaker	
	¢/dozen	%*	¢/dozen	%*	¢/dozen	%*
1996	33.0	63.7	24.6	72.9	8.4	87.3
1997	34.5	58.8	24.8	70.4	9.7	83.5
1998	36.0	54.2	25.3	67.8	10.7	79.9
1999	37.1	45.5	25.7	62.3	11.4	73.1
2000	39.0	46.0	27.9	61.4	11.1	74.9
2001	37.7	45.6	32.0	53.8	5.7	84.7
2002	38.2	46.2	32.7	53.9	5.5	85.6

* Large divided by breaker, Large divided by GNR, Breaker divided by GNR.