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# Price Reactions After the Official Release of the NASS Honey Publication

Christopher W. Taylor

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## EXECUTIVE SUMMARY

The agricultural industry often asks, “What effects will the publishing of agricultural statistics have on the market of our product?” Markets of agricultural commodities that involve a great deal of speculation have especially wondered about this. In response, the National Agricultural Statistics Service (NASS) of the United States Department of Agriculture (USDA) publishes two reports (*Price Reactions After USDA Crop Reports* and *Price Reactions After USDA Livestock Reports*) showing that the price reactions to the official release of certain NASS publications tend to even out over time.

This report focuses on the honey industry and supports NASS’s findings that the price reactions to the official release of certain reports tend to even out over time. It also concludes that the official release of the NASS *Honey* publication has no systematic effect on the honey market. The independent price data used in assessing the impact of the NASS publication release were obtained from the *National Honey Report* published by the Agricultural Marketing Service (AMS) of the USDA.



# Price Reactions After the Official Release of the NASS *Honey* Publication

Christopher W. Taylor<sup>1</sup>

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## Abstract

The National Agricultural Statistics Service (NASS) of the United States Department of Agriculture (USDA) conducts hundreds of surveys to make estimates on crops, livestock, production practices, farm economics, etc. Some elements of the agricultural industry ask, “What effects will the publishing of agricultural statistics have on the market of our product?” Markets of agricultural commodities that involve a great deal of speculation have especially wondered about this. In response, NASS publishes two reports (*Price Reactions After USDA Crop Reports* and *Price Reactions After USDA Livestock Reports*) showing that the price reactions to the official release of certain NASS publications tend to even out over time.

This report examines the honey market which was not covered in NASS’s earlier price reactions studies. The independent price data used in assessing the impact of the NASS publication release were obtained from the *National Honey Report* published by the Agricultural Marketing Service (AMS) of the USDA. The mean interval estimate determined from the sample of 65 measured price reactions with a confidence level of 95 percent is between  $-\$0.03$  and  $\$0.01$ . The interval is short, includes zero, and is roughly symmetric about zero. A frequency distribution comparison (including a sample mean t-test) also supports this conclusion and suggests that the official release of the NASS *Honey* publication has no systematic effect on the honey market.

**KEY WORDS:** NASS *Honey* Publication, price reaction, chi-square distribution goodness-of-fit test.

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<sup>1</sup> Christopher W. Taylor is a student in the Department of Agricultural Sciences and the Department of Mathematics and Physics at Tennessee State University (3500 John A. Merritt Blvd., Nashville, TN 37209) and an intern at the National Agricultural Statistics Service – Research and Development Division (Suite 305, 3251 Old Lee Hwy., Fairfax, VA 22030). An earlier draft of this paper was presented at the National Society for Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS) 22<sup>nd</sup> Annual Career Fair and Training Conference, March 2007. The author wishes to acknowledge Terry O’Connor, Michael Gerling, Tim Keller and Sharyn Lavender for their comments on the updated manuscript and Surrendra P. Singh for his comments on the early draft of it.

## 1) INTRODUCTION

The purpose of the National Agricultural Statistics Service (NASS) of the United States Department of Agriculture (USDA) is to provide timely, accurate, and useful statistics on United States and Puerto Rico agriculture. To accomplish this, NASS conducts hundreds of surveys to make estimates on crops, livestock, production practices, farm economics, etc.

NASS publishes its honey statistics in an annual report entitled *Honey* (see Appendix A for the February 2007 NASS *Honey* publication). The honey statistics are obtained by sending out the NASS *Bee and Honey Inquiry* questionnaire every year to beekeepers (see Appendix B for this questionnaire).

Since 1986 NASS has published honey statistics on honey-producing beekeepers with five or more colonies. These statistics consist of the number of honey-producing colonies, yield per colony, production, stocks held by producers on December 15, average price per pound and value of production. The average price of honey, on the national level, is broken down into individual prices based on its color class and marketing channel used. Most states are included in the annual release of these statistics produced by NASS. Some states, however, such as Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, Oklahoma, Rhode Island and South Carolina, are grouped in a category called "Other States."

Over time, some individuals have implied that the release of publications from NASS, such as the NASS *Honey* Publication, cause prices to fall. Using market prices determined by the *National Honey Report* of the Agricultural Marketing Service (AMS) of the USDA, this research report examines the impact of the official

release of the NASS *Honey* publication on the market price of honey using three statistical methods:

- 1) An interval estimation of the price reaction.
- 2) A chi-square distribution goodness-of-fit test using price reaction data.
- 3) A comparison of the "true" price reaction frequency distribution to a related, "controlled" price reaction frequency distribution. A t-test for determining if there is a difference between the mean of the "true" price reaction frequency distribution and the mean of the "controlled" price reaction frequency distribution was also included in this step.

See Appendices C and D for copies of the February and March 2007 AMS *National Honey Report* publications. This report will use statistical definitions and tests shown by Bluman (2007).

AMS is an agency in the USDA that focuses on assisting producers in various stages of the marketing of agricultural products. Some of these include standardization, overseeing marketing orders and agreements, administering research and promotion programs, purchasing commodities for Federal food programs, and supporting scientific research related to the marketing of agricultural products.

NASS examines on an on-going, yearly basis whether NASS reports have influenced the prices of agricultural crops (such as corn, soybean, wheat and cotton) and livestock (such as cattle and pigs). This examination culminates in two annual NASS reports titled *Price Reactions After USDA Crop Reports* and *Price Reactions After USDA Livestock Reports*. These reports indicate that price reactions after the official release of NASS reports on specific agricultural commodity markets tend to even out over time (see Appendix E for the first page of

the 2007 *Price Reactions After USDA Livestock Reports*). That is, the prices of specific commodities increase about as much as they decrease and remain the same after the official release of NASS reports (NASS, 2007). Examples of NASS reports that are used for measuring price reactions are *Cattle on Feed, Crop Production, Grain Stocks, Hogs and Pigs*, and *Milk Production*.

## 2) METHODOLOGY

AMS publishes several market news reports for agricultural commodities. The market news report for honey, entitled the *National Honey Report*, is the source of data for this report. This report has been published monthly since July 2000. Hence, seven years of data were available.

AMS conducts a survey to obtain its honey price data. They contact honey distributors (wholesalers, packers/shippers, and brokers) that sell honey in different states from different floral sources and with different colors. Because of this product variation, only prices from honey with the same floral source, color and state origin from February to March for each year were used in the price reaction data analysis.

For example, white clover honey from South Dakota was one of the data items used in the 2007 price reaction because it was available in both February and March (see Appendices C and D for the February and March 2007 reports). The other two data items used for the 2007 price reactions were white clover honey from Montana and extra light amber clover honey from South Dakota.

February and March were chosen because the February publication is always released just before the NASS *Honey* publication is released, and the March publication is always released just after the

NASS *Honey* publication is released. (The NASS *Honey* publication is released towards the end of February.) A total of 65 price reactions of the price of a particular type of honey (based on the aforementioned criteria) were used to measure the impact of the official release of the NASS *Honey* publication. Every price change was obtained from honey sold in volumes of 10,000 pounds or greater. Therefore, each price reaction can be given an equal weight.

For the comparison of the price reaction data to the related “controlled” price reaction data, only prices from honey with the same floral source, color and state origin from March to April in a particular year were used in the price reaction data analysis. March and April were chosen because these months are most similar to February and March in terms of the general trend in the honey market, except, of course, that the NASS *Honey* publication is not released in March or April. Hence, this measured price reaction will serve as a “control” to measure if the official release of the NASS *Honey* publication has an effect on the price of honey. To do this, frequency distributions were compared for the “true” price reaction data (from February to March) and the “controlled” price reaction data (from March to April).

AMS honey price data differ from NASS honey price data in that it measures the price that *buyers* are paying honey producers for their honey. (NASS asks the *producers* what they are receiving for their first sale.)

AMS produces its *National Honey Report* independently from NASS. AMS “does not collaborate with NASS” to produce the *National Honey Report*. “The [honey] market as reported by Market News is based upon sales as reported by honey packers, cross-checked with sellers to the extent possible” (Long, 2006).

A frequency distribution was prepared using the “true” price reactions measured in the month after the release of the NASS *Honey* report. In this case, the data points, as stated earlier, represent the price reaction of particular type of honey from February to March. It is important to note that a honey could only be of a particular type if it was from the same state and had the same floral source and color. From the frequency distribution of these data points, a mean of the data was calculated. The confidence level for the confidence interval was set at 95 percent. Although the standard deviation of the population is unknown, the sample size is greater than 30 (and the standard deviation of the sample used in forming the confidence interval can be used). Therefore, the standard normal distribution (using the z-test) was used to find the mean confidence interval.

A chi-square distribution goodness-of-fit test was also performed on the data to determine if the null hypothesis for the goodness-of-fit test was supported or rejected. The null hypothesis conjectured for the test was that the price reactions were negative, zero, and positive an equal number of times. The alternative hypothesis, then, was that the distribution was not the same as stated in the null hypothesis. Stated statistically, the null and alternative hypotheses were as follows:

$H_0$ : The price reactions are negative, zero, and positive an equal number of times.

$H_1$ : The distribution is not the same as stated in the null hypothesis.

Similarly, the null and alternative hypotheses for the frequency distribution comparison were as follows:

$H_0$ : The “true” price reactions are the same as the “controlled” price reactions.

$H_1$ : The “true” price reactions are *not* the same as the “controlled” price reactions.

### 3) ANALYSIS OF THE DATA

Table 1 shows the frequency distribution of the price reaction data for all seven years. The mean point estimate price reaction of honey after the official release of the NASS *Honey* publication calculated from the 65 measured price reactions was -\$0.01. Mean point estimates for each year’s three categories of price reactions are included in Table 2 for reference. The numbers of observations for each year are not equal because the honey had to be of a particular type to qualify for the price reactions, and every particular type was not available from month to month and year to year.

Furthermore, the standard deviation for the sample data is \$0.10. Using these statistics and a z-test value of 1.96 (derived from the chosen 95 percent confidence rating), the interval estimate for the population mean of the price reaction of honey to the release of the NASS *Honey* publication is somewhere between -\$0.03 and \$0.01, with 95 percent confidence.



**Table 1: Frequency Distribution of “True” Price Reaction Data**

<b>Class limits</b>	<b>Class boundaries</b>	<b>Frequency (<i>f</i>)</b>	<b>Midpoint (<math>X_m</math>)</b>
	<i>Dollars</i>		<i>Dollars</i>
less than -0.305	---	1	-0.315
-0.30 to -0.20	-0.305 to -0.195	1	-0.250
-0.19 to -0.10	-0.195 to -0.095	4	-0.145
-0.09 to 0.00	-0.095 to 0.005	35	-0.045
0.01 to 0.10	0.005 to 0.105	21	0.055
0.11 to 0.20	0.105 to 0.205	2	0.155
0.205 or more	---	1	0.500
		<b>65</b>	<b>-0.010*</b>

\* Mean point estimate for “true” price reactions

**Table 2: Annual Honey “True” Price Reactions to Official Release of *Honey* Based on Prices from AMS**

<b>Year</b>	<b>After Release of <i>Honey</i></b>					
	<b>Increase</b>		<b>Same</b>		<b>Decrease</b>	
	<b>Number</b>	<b>Average</b>	<b>Number</b>	<b>Average</b>	<b>Number</b>	<b>Average</b>
		<i>Dollars</i>		<i>Dollars</i>		<i>Dollars</i>
2001	4	0.0075	4	---	2	-0.0200
2002	6	0.0200	3	---	1	-0.0100
2003	1	0.5000	1	---	1	-0.0250
2004	3	0.0550	2	---	7	-0.0743
2005	5	0.0865	2	---	9	-0.1022
2006	5	0.0480	4	---	2	-0.0125
2007	0	---	0	---	3	-0.0500
<b>All Years</b>	<b>24</b>	<b>0.0620</b>	<b>16</b>	<b>---</b>	<b>25</b>	<b>-0.0676</b>

Table 3 shows the observed and expected frequencies to be used in the chi-square distribution goodness-of-fit test. Observed frequencies (O) refer to the categories that the “true” price reactions fit into. Expected frequencies (E) refer to the expected value for the case that the negative, zero and positive price reactions are equal.

Given that there are three different categories available for the distribution of the price reactions (negative, zero, and positive), there are two degrees of freedom. Hence, with a confidence rating of 95 percent, the critical value is 5.99. The chi-square value calculated from the actual and expected frequencies is, on the other hand, 2.25. Since the chi-square value is lower than the critical value, there is not enough evidence to reject the claim that the price reactions to the official release of the NASS *Honey* Publication tend to even out over time. The expected frequencies are not significantly different from those given in the null hypothesis. Another observation that supports this claim is that the number of negative price reactions (25) is

approximately equal to the number of positive price reactions (24).

Table 4 shows the frequency distribution of the “controlled” price reaction data (see Table 5 for mean point estimates for each year’s three types of price reactions). Again, the numbers of observations for each year are not equal because the honey had to be of a particular type to qualify for the price reactions, and every particular type was not available from month to month and year to year. The mean point estimate of the “controlled” price reaction data is  $-\$0.03$  and the standard deviation is  $\$0.08$ , while the mean of the “true” price reaction data, as stated earlier, was  $-\$0.01$  and the standard deviation was  $\$0.10$ .

Figure 1 shows that both price reactions have similar shaped distributions. It is important to note that (using a t-test) the two means are not significantly different at the 0.05 alpha level. (In this case, the calculated t-value,  $-1.19$  is greater than the calculated critical value,  $-1.98$ .) Hence, it can be concluded that the two distributions are approximately the same.

**Table 3: Observed Frequencies (O) and Expected Frequencies (E)**

	Negative	Zero	Positive
<i>Number of Price Reactions</i>			
<b>O</b>	25	16	24
<b>E</b>	21.67	21.67	21.67

**Table 4: Frequency Distribution of “Controlled” Price Reaction Data**

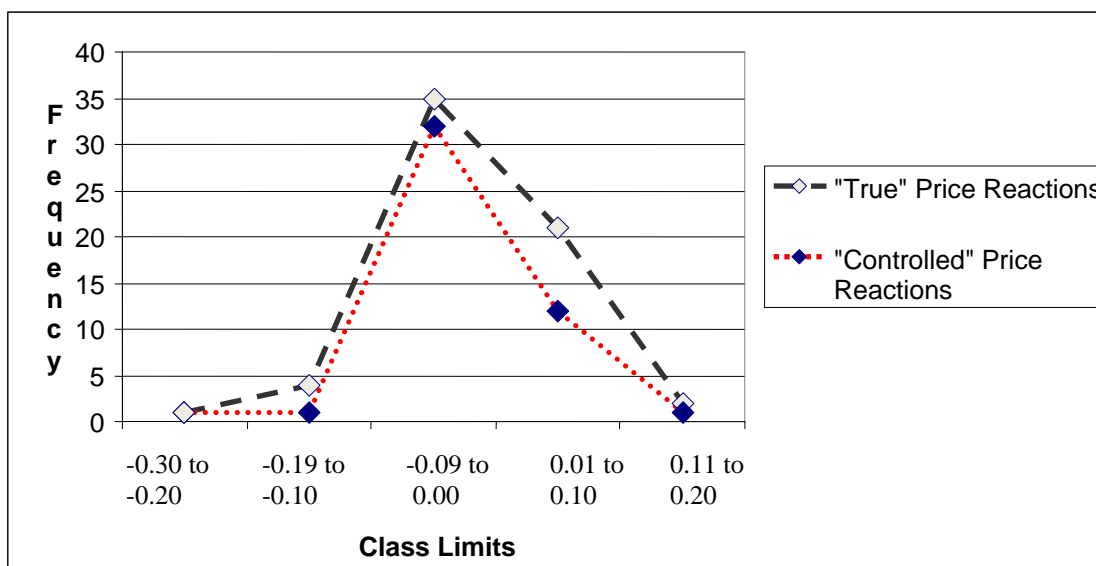
<b>Class limits</b>	<b>Class boundaries</b>	<b>Frequency (<i>f</i>)</b>	<b>Midpoint (<math>X_m</math>)</b>
	<i>Dollars</i>		<i>Dollars</i>
less than -0.305	---	1	-0.405
-0.30 to -0.20	-0.305 to -0.195	1	-0.250
-0.19 to -0.10	-0.195 to -0.095	1	-0.145
-0.09 to 0.00	-0.095 to 0.005	32	-0.045
0.01 to 0.10	0.005 to 0.105	12	0.055
0.11 to 0.20	0.105 to 0.205	1	0.155
0.205 or more	---	0	---
		<b>48</b>	<b>-0.030*</b>

\* Mean point estimate for “controlled” price reactions

**Table 5: Annual Honey Price Reactions to Official Release of *Honey* Based on Prices from AMS, Number of and Mean Point Estimates for “Controlled” Price Changes**

<b>Year</b>	<b>Controlled Price Reaction</b>					
	<b>Increase</b>		<b>Same</b>		<b>Decrease</b>	
	<b>Number</b>	<b>Average</b>	<b>Number</b>	<b>Average</b>	<b>Number</b>	<b>Average</b>
		<i>Dollars</i>		<i>Dollars</i>		<i>Dollars</i>
2001	1	0.0150	3	---	4	-0.0125
2002	2	0.0125	0	---	2	-0.0225
2003	1	0.0500	1	---	1	-0.0500
2004	3	0.0200	1	---	8	-0.0863
2005	2	0.0450	1	---	5	-0.0880
2006	4	0.0550	2	---	2	-0.0450
2007	0	---	1	---	4	-0.0238
<b>All Years</b>	<b>13</b>	<b>0.0354</b>	<b>9</b>	<b>---</b>	<b>26</b>	<b>-0.0562</b>

**Figure 1: Comparison of the Frequency Distributions of the “True” and “Controlled” Price Reactions (Excluding Classes with Open-ended Limits)**



#### 4) SUMMARY AND CONCLUSIONS

The interval estimate determined from the sample of 65 measured price reactions with a confidence level of 95 percent falls between  $-\$0.03$  and  $\$0.01$ . This means that this interval is short, includes zero, and is roughly symmetric about zero. A chi-square distribution goodness-of-fit test (with a confidence level of 95 percent again) showed that the null hypothesis, which stated that the price reactions are negative, zero and positive an equal number of times, could not be rejected. Both of these findings support the claim that the price reactions to the official release of the NASS *Honey* Publication tend to even out over time.

The comparison of the frequency distribution and means of the “true” and “controlled” price reactions showed that the distributions of the price reactions are approximately the same. The overall conclusion of the report is therefore that the official release of the NASS *Honey*

publication has no systematic effect on the honey market.

#### 5) REFERENCES

- Bluman, Allan G. 2007. *Elementary Statistics: A Step by Step Approach (Sixth Edition)*. Boston, MA: McGraw-Hill.
- Long, Terry. 2006. Branch Chief for Fruit and Vegetable Market News, Agricultural Marketing Service, United States Department of Agriculture, personal communication.
- U.S. Department of Agriculture, National Agricultural Statistics Service. 2007. *Price Reactions After USDA Livestock Report and Price Reactions After USDA Crop Report*.

## Appendix A: February 2007 NASS *Honey* Publication



# Honey

Released February 28, 2007, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, U.S. Department of Agriculture. For information on *Honey* call Sharyn Lavender at (202) 720-3244, office hours 7:30 a.m. to 4:00 p.m. ET.

### United States Honey Production Down 11 Percent

Honey production in 2006 from producers with five or more colonies totaled 155 million pounds, down 11 percent from 2005. There were 2.39 million colonies producing honey in 2006, down 1 percent from 2005. Yield per colony averaged 64.7 pounds, down 11 percent from the 72.4 pounds in 2005. Colonies which produced honey in more than one State were counted in each State where the honey was produced, therefore yields per colony may be understated. Colonies were not included if honey was not harvested. Producer honey stocks were 60.5 million pounds on December 15, 2006, down 3 percent from a year earlier. Stocks held by producers exclude stocks held under the commodity loan program.

### Honey Prices Up 14 Percent

Honey 2006 prices increased to 104.2 cents, up 14 percent from 91.8 cents in 2005. Prices are based on retail sales by producers and sales to private processors and cooperatives. State level honey prices reflect the portions of honey sold through retail, co-op, and private channels. Honey prices for each color class are derived by weighting quantities sold for each marketing channel. Honey prices for 2006 were up from the previous year for all color class totals.

**Honey: Price by Color Class, United States, 2005-06**

Color Class	Price					
	Co-op and Private		Retail		All	
	2005	2006	2005	2006	2005	2006
	<i>Cents per Pound</i>	<i>Cents per Pound</i>	<i>Cents per Pound</i>	<i>Cents per Pound</i>	<i>Cents per Pound</i>	<i>Cents per Pound</i>
Water White, Extra White, White	82.7	93.9	181.3	179.4	87.3	97.3
Extra Light Amber	79.8	95.7	176.0	167.8	92.2	103.9
Light Amber, Amber, Dark Amber	77.2	88.3	180.8	200.1	97.0	108.4
All Other Honey, Area Specialties	95.5	154.9	269.0	244.3	110.7	176.1
All Honey	81.2	93.7	181.4	191.0	91.8	104.2

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**Honey: Number of Colonies, Yield, Production, Stocks, Price,  
and Value by State and United States, 2005<sup>1 2</sup>**

State	Honey Producing Colonies	Yield per Colony	Production	Stocks Dec 15 <sup>3</sup>	Average Price per Pound <sup>4</sup>	Value of Production
	<i>1,000</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>Cents</i>	<i>1,000 Dollars</i>
AL	13	66	858	266	110	944
AZ	36	50	1,800	720	105	1,890
AR	36	69	2,484	571	83	2,062
CA	400	75	30,000	9,300	84	25,200
CO	28	70	1,960	902	97	1,901
FL	160	86	13,760	2,477	86	11,834
GA	59	49	2,891	434	89	2,573
HI	9	131	1,179	283	143	1,686
ID	95	37	3,515	1,793	80	2,812
IL	8	85	680	408	186	1,265
IN	8	64	512	189	122	625
IA	28	88	2,464	1,232	122	3,006
KS	16	50	800	328	109	872
KY	5	50	250	40	208	520
LA	35	97	3,395	611	72	2,444
ME	8	26	208	193	166	345
MI	65	68	4,420	2,519	96	4,243
MN	120	74	8,880	1,598	79	7,015
MS	16	80	1,280	346	67	858
MO	15	50	750	180	122	915
MT	130	67	8,710	3,136	83	7,229
NE	40	68	2,720	2,530	82	2,230
NV	12	46	552	442	311	1,717
NJ	12	32	384	104	121	465
NM	7	49	343	113	103	353
NY	60	73	4,380	2,321	138	6,044
NC	10	54	540	146	188	1,015
ND	370	91	33,670	8,418	82	27,609
OH	15	69	1,035	580	142	1,470
OR	39	42	1,638	557	107	1,753
PA	28	56	1,568	800	113	1,772
SD	220	79	17,380	11,818	79	13,730
TN	7	55	385	92	170	655
TX	84	71	5,964	954	87	5,189
UT	23	45	1,035	331	102	1,056
VT	6	91	546	169	112	612
VA	8	37	296	59	222	657
WA	51	55	2,805	1,935	102	2,861
WV	8	51	408	102	130	530
WI	64	83	5,312	2,922	119	6,321
WY	40	56	2,240	291	85	1,904
Oth Sts <sup>5 6</sup>	19	43	821	268	274	2,246
US <sup>6</sup>	2,413	72.4	174,818	62,478	91.8	160,428

<sup>1</sup> For producers with 5 or more colonies. Colonies which produced honey in more than one State were counted in each State.

<sup>2</sup> Revised.

<sup>3</sup> Stocks held by producers.

<sup>4</sup> Prices weighted by sales.

<sup>5</sup> CT, DE, MD, MA, NH, OK, RI, and SC not published separately to avoid disclosing data for individual operations.

<sup>6</sup> Due to rounding, total colonies multiplied by total yield may not exactly equal production.

**Honey: Number of Colonies, Yield, Production, Stocks, Price,  
and Value by State and United States, 2006<sup>1</sup>**

State	Honey Producing Colonies	Yield per Colony	Production	Stocks Dec 15 <sup>2</sup>	Average Price per Pound <sup>3</sup>	Value of Production
	<i>1,000</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>Cents</i>	<i>1,000 Dollars</i>
AL	11	72	792	230	146	1,156
AZ	30	65	1,950	839	139	2,711
AR	32	76	2,432	730	105	2,554
CA	380	52	19,760	7,706	98	19,365
CO	36	75	2,700	1,458	139	3,753
FL	170	81	13,770	1,790	101	13,908
GA	63	74	4,662	746	116	5,408
HI	10	93	930	233	119	1,107
ID	95	44	4,180	2,592	86	3,595
IL	10	66	660	356	188	1,241
IN	6	54	324	107	151	489
IA	26	84	2,184	1,441	115	2,512
KS	14	55	770	246	140	1,078
KY	5	56	280	70	220	616
LA	30	90	2,700	675	89	2,403
ME	11	23	253	86	200	506
MI	72	55	3,960	2,099	128	5,069
MN	125	80	10,000	3,300	89	8,900
MS	14	98	1,372	453	105	1,441
MO	15	46	690	117	149	1,028
MT	132	79	10,428	1,981	100	10,428
NE	47	73	3,431	3,843	104	3,568
NV	9	37	333	50	355	1,182
NJ	9	36	324	152	115	373
NM	7	48	336	104	96	323
NY	60	64	3,840	2,458	138	5,299
NC	10	50	500	215	156	780
ND	350	74	25,900	7,770	90	23,310
OH	14	56	784	282	145	1,137
OR	46	48	2,208	729	111	2,451
PA	28	40	1,120	605	161	1,803
SD	225	47	10,575	10,575	82	8,672
TN	7	55	385	58	184	708
TX	82	70	5,740	976	87	4,994
UT	23	50	1,150	265	105	1,208
VT	6	56	336	144	121	407
VA	8	42	336	114	219	736
WA	49	52	2,548	1,605	119	3,032
WV	5	42	210	57	195	410
WI	64	93	5,952	2,500	114	6,785
WY	39	85	3,315	497	88	2,917
Oth Sts <sup>4,5</sup>	17	43	726	274	269	1,951
US <sup>5</sup>	2,392	64.7	154,846	60,528	104.2	161,314

<sup>1</sup> For producers with 5 or more colonies. Colonies which produced honey in more than one State were counted in each State.

<sup>2</sup> Stocks held by producers.

<sup>3</sup> Prices weighted by sales.

<sup>4</sup> CT, DE, MD, MA, NH, OK, RI, and SC not published separately to avoid disclosing data for individual operations.

<sup>5</sup> Due to rounding, total colonies multiplied by total yield may not exactly equal production.

**Information Contacts**

Listed below are the commodity specialists in the Livestock Branch of the National Agricultural Statistics Service to contact for additional information.

- Dan Kerestes, Chief, Livestock Branch ..... (202) 720-3570
- Darin Jantzi, Head, Poultry and Specialty Commodities Section ..... (202) 720-3570
- Mark Aitken - Layers, Eggs ..... (202) 690-8632
- David Colwell - Cold Storage ..... (202) 720-8784
- Fleming Gibson - Egg Products, Poultry Slaughter, Catfish Processing, Mink,  
Turkey Hatchery, Turkeys Raised ..... (202) 690-3237
- Sharyn Lavender - Broiler Hatchery, Chicken Hatchery, Honey ..... (202) 720-3244
- Toby Paterson - Catfish Production, Trout Production, Census of Aquaculture ..... (202) 720-0585

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**INTERNET ACCESS**

All NASS reports are available free of charge on the worldwide Internet. For access, connect to the Internet and go to the NASS Home Page at: [www.nass.usda.gov](http://www.nass.usda.gov).

**E-MAIL SUBSCRIPTION**

All NASS reports are available by subscription free of charge direct to your e-mail address. Starting with the NASS Home Page at [www.nass.usda.gov](http://www.nass.usda.gov), under the right navigation, *Receive reports by Email*, click on **National** or **State**. Follow the instructions on the screen.

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**CALL OUR TOLL-FREE ORDER DESK: 800-999-6779 (U.S. and Canada)**  
**Other areas, please call 703-605-6220      FAX: 703-605-6900**  
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**ASSISTANCE**

For assistance with general agricultural statistics or further information about NASS or its products or services, contact the **Agricultural Statistics Hotline** at 800-727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: [nass@nass.usda.gov](mailto:nass@nass.usda.gov).

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## Appendix B: 2006 Bee and Honey Inquiry Questionnaire

Project Code 196 QID 110096

OMB No. 0535-0153: Approval Expires 11/30/2009



### BEE AND HONEY INQUIRY DECEMBER 2006



National Agricultural Statistics Service  
U.S. Department of Agriculture  
Rm 5030, South Building  
1400 Independence Ave., S.W.  
Washington, DC 20250-2000  
Phone 1-800-892-1660, FAX 307-432-5598  
nass@nass.usda.gov

The following data are needed to prepare State and National estimates of honey production and prices. Although this survey is voluntary, your response is important to ensure that reliable honey production and price statistics are available. Individual reports are kept confidential. These estimates will be published in the Honey Report on February 28<sup>th</sup>. Please complete and return this report promptly in the postage paid envelope enclosed.

Please make corrections to name, address and Zip Code, if necessary.

Office Use Box

785
-----

#### Please Complete the Following Questions for All Apiaries You Owned or Controlled During 2006

1. Report for each State in which you had colonies. It is possible to report the same colonies in more than one State.

State (List all States in which this operation had colonies in 2006.)	What was the largest number of colonies, for all purposes, that this operation had in 2006 in this State? (Include colonies for honey production, pollination, hobby, etc.)	From how many of these colonies did you harvest or "pull off" honey in this State?	How many total pounds of honey were harvested in this State from these colonies?	How many pounds of honey stocks did this operation have for sale in this State on Dec 15 <sup>th</sup> 2006? (Exclude honey under government or CCC loans.)
	Colonies	Colonies	Pounds	Pounds
800	801	802	803	804
805	806	807	808	809
810	811	812	813	814
815	816	817	818	819
820	821	822	823	824

2. How many **TOTAL POUNDS** of honey did this operation harvest in all States in 2006. ....

880
-----

OFFICE USE
190
191

Continue on next page

OFFICE USE
720

3. Did you **sell** any honey during **2006**?  
 (Include **sales** of honey produced in **2005**) . . . .  **YES** (continue)     **NO** (Skip to # 5.)

4. Please report 2006 sales of honey, by class and by year of production. Report the pounds sold and dollars received in 2006 by your operation for honey produced by your operation in **2005** and **2006**.  
 (Do not include **resale** of honey produced by another operation.)

HONEY COLOR CLASS	MARKETING CHANNEL	HONEY PRODUCED IN **2006**		HONEY PRODUCED IN **2005**	
		Pounds Sold in 2006	Dollars Received in 2006 <sup>1/</sup>	Pounds Sold in 2006	Dollars Received in 2006 <sup>1/</sup>
Water white, extra white, and white (0 - 34 mm)	Sales to Private Processing Companies	723	724	721	722
	Sales to Cooperatives	727	728	725	726
	Retail Sales	731	732	729	730
Extra light amber (35 - 50mm)	Sales to Private Processing Companies	735	736	733	734
	Sales to Cooperatives	739	740	737	738
	Retail Sales	743	744	741	742
Light amber, amber and dark amber (51+ mm)	Sales to Private Processing Companies	747	748	745	746
	Sales to Cooperatives	751	752	749	750
	Retail Sales	755	756	753	754
Area specialties: Sourwood, tupelo, buckwheat, etc. (Honey not included in any of the above color classes)	Sales to Private Processing Companies	759	760	757	758
	Sales to Cooperatives	763	764	761	762
	Retail Sales	767	768	765	766

<sup>1/</sup> Report receipts before deductions of marketing charges such as transportation, grading, container costs, etc.

5. Would you like to receive a free copy of the results of this survey in the mail?  
 (The survey results will also be available on the Internet at <http://www.nass.usda.gov>)

Yes = 1. .... 099

Comments: \_\_\_\_\_

OFFICE USE					
Response	Respondent	Mode	Enum.	Eval.	
1-Comp	9901	1-Op/Mgr	9902	1-Mail	9903
2-R		2-Sp		2-Tel	098
3-Inac		3-Acct/Bkpr		3-Face-to-Face	100
4-Office Hold		4-Partner		4-CATI	
5-R - Est		9-Oth		5-Web	
6-Inac - Est				6-e-mail	
7-Off Hold - Est				7-Fax	
8-Known Zero				8-CATI	
				19-Other	

S/E Name \_\_\_\_\_

Respondent's Name: \_\_\_\_\_ Phone: ( ) \_\_\_\_\_

9910	MM	DD	YY
Date:			

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The time required to complete this information collection is estimated to average 10 minutes per response.

Appendix C: Page One of February 2007 AMS National Honey Report Publication

# NATIONAL HONEY REPORT



United States  
Department of  
Agriculture

Agricultural Marketing Service  
Fruit and Vegetable Programs  
Market News Branch

2202 Monterey St. Suite 104-F  
Fresno, CA 93721  
Phone: 559-487-5178 FAX: 559-487-5199

Website: <http://marketnews.usda.gov/portal/fv>  
[www.ams.usda.gov/marketnews.htm](http://www.ams.usda.gov/marketnews.htm)

Federal Market News Service  
21 North 1<sup>st</sup> Ave., Suite 224  
Yakima, WA 98902  
Phone: 509-575-8615 FAX: 509-575-5648

Issued Monthly

Number XXVII - #1

February 12, 2007

## HONEY MARKET FOR THE MONTH OF JANUARY, 2007 IN VOLUMES OF 10,000 POUNDS OR GREATER UNLESS OTHERWISE STATED

Prices paid to beekeepers for extracted, unprocessed honey in major producing states by packers, handlers & other large users, cents per pound, f.o.b. or delivered nearby, containers exchanged or returned, prompt delivery & payment unless otherwise stated.

- REPORT INCLUDES BOTH NEW AND OLD CROP HONEY -

(# Some in Small Lot --- +Some delayed payments or previous commitments)

ARKANSAS – Soybean, light amber, 80¢

CALIFORNIA — Cotton/Alfalfa, light amber, 84 - 85¢

FLORIDA – Mixed Flowers, extra light amber, \$1.10  
- Gallberry, extra light amber, \$1.15#+

MONTANA – Clover, white, \$1.00

SOUTH DAKOTA – Clover, white, 90 - 91¢  
- Clover, extra light amber, 87 - 98¢

Prices paid to Canadian Beekeepers for unprocessed, bulk honey by packers and importers in U. S. currency, f.o.b. shipping point, containers included unless otherwise stated. Duty and crossing charges extra. Cents per pound.

ALBERTA – Clover, white, 89 - 93¢

Prices paid to importers for bulk honey, duty paid, containers included, cents per pound, ex-dock or point of entry unless otherwise stated.

### EAST COAST - - -

Argentina – Clover/Alfalfa, white, 89¢  
India – Mixed Flowers, light amber, 79¢

### WEST COAST - - -

Vietnam – Mixed Flowers, light amber, 85¢+

## NATIONAL HONEY BOARD NEWS

The National Honey Board (NHB) recently approved an emergency request for \$13,000 to support research into significant bee losses sustained in recent months to undetermined cause(s), a phenomena termed "Colony Collapse Disorder." The research group requesting the funds will use it as seed money to begin the research, and is seeking additional funding from other sources.

In late 2006, beekeepers throughout the United States began reporting large losses in honey bee colonies. Although bee experts have identified several possible culprits, a prevailing theory has yet to emerge. The research group, the Colony Collapse Disorder (CCD) work group, is composed of university faculty researchers, state regulatory officials, cooperative extension educators and industry representatives. The CCD group and Bee Alert Technology are asking beekeepers' assistance in reporting instances of honey bee Colony Collapse Disorder and narrowing down management practices and environmental factors that might be common to these losses. Beekeepers can assist with this effort by participating in the National Bee Loss Survey at [www.beesurvey.com](http://www.beesurvey.com).

The National Honey Board (NHB) will fund four production research projects in 2007 to study a variety of colony health issues. Funding for the projects totals \$108,748. NHB began funding production research projects in 2004 to help beekeepers maintain colony health, without adversely affecting their ability to produce quality honey. From 2004-2006, NHB funded twelve such projects with funding totaling \$183,067, averaging approximately \$60,000 per year. The increase in production research funding this year is a result of an increase in assessments received.

Following is a list of the 2007 projects, followed by the researcher and university or research lab that submitted the research proposal:

"Treatment and Monitoring Regimes to Ensure Colony Vigor and Prevent Fall Dwindle Disease", Dennis vanEngelsdorp, Pennsylvania State University.

"Cyclodextrins as Carriers of Essential Oils for Varroa Control in Honeybees", Blaise LeBlanc, Carl Hayden Bee Research Center.

"Contaminants in High Fructose Corn Syrup & Their Possible Effects on Bees", Blaise LeBlanc, Carl Hayden Bee Research Center.

"The Benefits of Propolis to Honey Bees", Marla Spivak, Univ. of Minnesota.

For more information on the research projects, contact Charlotte Jordan, NHB project manager at (800) 553-7162. NHB conducts research, advertising and promotion programs to help maintain and expand domestic and foreign markets for honey. These programs are funded by an assessment of one cent per pound on domestic and imported honey.

# NATIONAL HONEY REPORT



United States  
Department of  
Agriculture

Agricultural Marketing Service  
Fruit and Vegetable Programs  
Market News Branch

2202 Monterey St. Suite 104-F  
Fresno, CA 93721  
Phone: 559-487-5178 FAX: 559-487-5199

Website: <http://marketnews.usda.gov/portal/fv>  
[www.ams.usda.gov/marketnews.htm](http://www.ams.usda.gov/marketnews.htm)

Federal Market News Service  
21 North 1<sup>st</sup> Ave., Suite 224  
Yakima, WA 98902  
Phone: 509-575-8615 FAX: 509-575-5648

Issued Monthly

Number XXVII - #2

March 9, 2007

## HONEY MARKET FOR THE MONTH OF FEBRUARY, 2007

### IN VOLUMES OF 10,000 POUNDS OR GREATER UNLESS OTHERWISE STATED

Prices paid to beekeepers for extracted, unprocessed honey in major producing states by packers, handlers & other large users, cents per pound, f.o.b. or delivered nearby, containers exchanged or returned, prompt delivery & payment unless otherwise stated.

- REPORT INCLUDES BOTH NEW AND OLD CROP HONEY -

( # Some in Small Lot --- +Some delayed payments or previous commitments)

**ARKANSAS** – Soybean, extra light amber, 80¢

**CALIFORNIA** — Sage/Buckwheat, extra light amber, 84-85¢  
- Cotton/Alfalfa, extra light & light amber, 80 - 84¢  
- Mixed Flowers, extra light amber, 90¢#+  
- Mixed Flowers, light amber, 85¢#+  
- Orange Blossom, extra light amber, \$1.00+

**FLORIDA** – Orange, extra light amber, \$1.20+

**KANSAS** – Clover, white, 87¢

**MICHIGAN** – Clover, white, 80 - 85¢  
- Star Thistle, white, 83 - 85¢  
- Wildflower, extra light amber, 80 - 85¢

**MINNESOTA** – Basswood/Lindon, white, 85¢

**MONTANA** – Clover, white, 90 - 95¢

**NORTH DAKOTA** – Alfalfa, white, 96¢  
- Alfalfa, extra light amber, 94 - 95¢  
- Alfalfa, light amber, 92¢  
- Clover, white, 83¢ - \$1.06  
- Clover, extra light amber, 96¢  
- Wildflower, white, \$1.03

**SOUTH DAKOTA** – Clover, white, 87 - 92¢  
- Clover, extra light amber, 86¢  
- Sunflower, extra light amber, 96¢

**WISCONSIN** – Clover, white, \$1.00

Prices paid to Canadian Beekeepers for unprocessed, bulk honey by packers and importers in U. S. currency, f.o.b. shipping point, containers included unless otherwise stated. Duty and crossing charges extra. Cents per pound.

**ALBERTA** – Clover, white, 87 - 93¢

**PROVINCE NOT REPORTED** – Canola, white, 76¢

Prices paid to importers for bulk honey, duty paid, containers included, cents per pound, ex-dock or point of entry unless otherwise stated.

### EAST COAST - - -

**Argentina** – Mixed Flowers, white, 84 - 96¢  
- Mixed Flowers, extra light amber, 84 - 97¢  
- Mixed Flowers, light amber, 86 - 87¢

**Brazil** - Mixed Flowers, extra light amber, 90¢

**Ukraine** – Sunflower, extra light amber, 87¢

**Uruguay** - Clover, white, 85¢

**Vietnam** – Mixed Flowers, light amber, 76¢

### WEST COAST - - -

**Vietnam** – Mixed Flowers, light amber, 84¢+

## NEWS

National Honey Producers Association representatives met with AMS personnel and discussed the proposed Honey Producers Program, a program being pursued by the industry to promote U. S. honey.

The proponent group expects to submit a new proposal to USDA by April.

## Appendix E: Page One of 2007 NASS *Price Reactions After USDA Livestock Reports* Publication



# Price Reactions After USDA Livestock Reports

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Released March 30, 2007, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, U.S. Department of Agriculture. For information on *Price Reactions After USDA Livestock Reports* call William Weaver at (202) 720-3570, office hours 7:30 a.m. to 4:00 p.m. ET.

This report contains price reactions to the U.S. Department of Agriculture's (USDA) *Cattle on Feed* reports, *Quarterly Hogs and Pigs* reports, and *Milk Production* reports.

The USDA *Cattle on Feed* report is released monthly and publishes on-feed inventory, fed cattle marketings, and feeder cattle placements. Monthly and annual average price reactions to the *Cattle on Feed* reports have been provided in this publication.

Also provided in this publication are price reactions to the USDA *Quarterly Hogs and Pigs* reports. These reports are published each year in March, June, September, and December and provide data on hog and pig inventory, sows farrowing, pig crop estimates, and 3-month and 6-month farrowing intentions.

The prices in this report for Cattle and Hogs represent sales from producers to first buyers at major markets as reported by USDA's Agricultural Marketing Service. The price reaction after the release of the *Cattle on Feed* and *Quarterly Hogs and Pigs* reports is indicated by the difference between the price the week prior to the report's release and the price the week after the report's release.

Dairy products price reactions to the USDA *Milk Production* reports have also been provided in this publication. The *Milk Production* report is released monthly and provides data on the number of milk cows, milk per cow and total milk production for the 23 major milk producing States. The butter and cheddar cheese prices in this publication are based on the daily cash settlement prices reported by the Chicago Mercantile Exchange. Weekly average prices are computed for the week before and the week after the release of each *Milk Production* report.