



## 2006 Kentucky Produce Planting & Marketing Intentions Survey and Outlook

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### Summary

The 2006 Kentucky Produce Planting & Marketing Intentions Survey measured marketing practices and planting intentions of Kentucky fruit and vegetable growers, focusing primarily on commercial vegetable growers. This is the fourth consecutive year this survey was conducted. This year's survey was returned by 269 produce growers representing 1,814 commercial vegetable acres and 526 commercial fruit acres. This represents a 22% response rate and approximately 23% of commercial produce acreage in Kentucky.

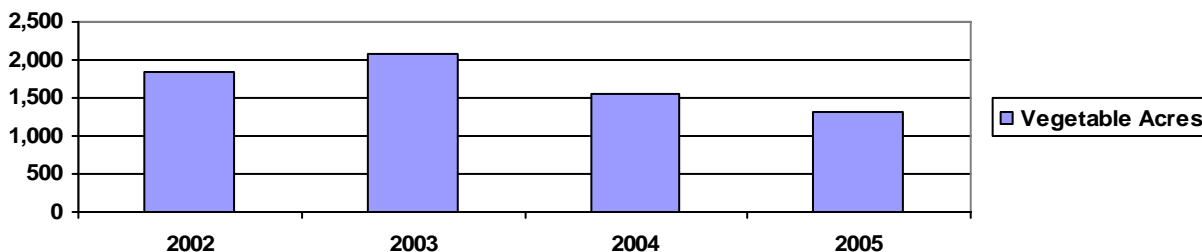
Gross sales from Kentucky's commercial produce will remain steady or increase from their 2005 level of \$32 million. These sales continue to increase, despite two vegetable marketing cooperatives closing in 2005, bolstered especially by vigorous growth among Kentucky's farmers' markets. Commercial vegetable acreage will increase to about 8,100 acres in 2006, while commercial fruit acreage will decrease about 18% from its 2005 level to about 2500 acres. Projections for specific produce items are presented in Appendix 4 at the end of this report. This survey indicates more producers are relying on direct sales at farmers' markets, and to retailers, bypassing middlemen in the produce supply chain, and keeping gross farm sales strong. Vegetable acreage formerly marketed through co-op facilities has been offset by growth in grower-shipper wholesale acreage, and vigorous growth by two of Kentucky's four produce auctions. Though still minor parts of the Kentucky produce deal, direct sales to restaurants and subscription sales (Community Supported Agriculture) also appear to be bolstering farm produce sales, especially among smaller producers.

### Structural Changes: Co-ops

Citing poor weather and weak markets, the boards of directors of two of Kentucky's vegetable marketing cooperatives (West Kentucky Growers Co-op, Owensboro and Green River Produce Co-op, Horse Cave) voted to close their doors after the 2005 season. These co-ops had received substantial support through tobacco settlement monies as opportunities for tobacco growers to diversify.

There were 19 producers responding to this survey that sold produce through a co-op in 2005. All but one of these producers planned to grow produce in 2006. The total decline in acreage among these producers was about 40%. There were ten of the growers who had participated in co-ops in 2005 that indicated they would grow tobacco in 2006; all of these marketed 75% or more of their produce through co-ops in 2005. The percent of growers responding to this survey who used cooperatives to market any fresh produce decreased from 17% in 2002, to 11% in 2004, to 7% in 2005. *Changes in co-op acreage, by crop, from 2002-2005 are reported in Appendix 1.*

**Figure 1. Kentucky Vegetable Co-op Acres, 2002-05**



It is important to note that while the produce marketed through the cooperatives tended to involve larger producers and captured much of the media attention as the industry has been developing, it represents only a small fraction of the produce marketing activity in Kentucky. Only 8% of the producers responded indicated they sold over 10% of their produce through a cooperative in 2005. Further, acreage projections continue to increase overall, despite the business closures observed. Direct marketing and other wholesale marketing channels remain vital to most growers.

### **Tobacco Production**

Large numbers of Kentucky's tobacco growers exited tobacco production in 2005 in response to the national tobacco buyout program. The impact of this exit on total farm incomes is yet to be determined. Almost 25% of the producers responding to this survey said they grew tobacco on their farm in 2005, compared to about 45% in the previous five years. About one in three (37%) of those who grew tobacco in 2005 indicated they would *not* grow tobacco in 2006. Interestingly, nine of the growers who grew tobacco in 2005 indicated they would not grow tobacco in 2006, and five of these growers indicated that they would be expanding vegetable production.

### **New or Expanding Markets**

In spite of co-op marketing uncertainty, the 2006 value of Kentucky vegetable and fruit production is projected here to continue to rise as producers are discovering other, profitable markets, including many direct markets.

### ***Farmers' Markets***

Kentucky farmers' markets have tripled in number during the past decade. There were 95 farmers' markets registered with the Kentucky Department of Agriculture in 2005 with estimated gross sales of \$8 million. Farmers' markets account for about one-quarter of all Kentucky farm produce sales.

The percentage of respondents to this survey using farmers' markets to sell 10% or more of their produce has increased by 5% per year since 2002. In 2002, 42% of respondents indicated they sold 10% or more of produce at farmers' market. In 2003, the level rose to 47%; in 2004, 52% of respondents said they sold 10% or more of their produce at farmers' markets. In 2005, 58% of respondents said they used farmers' markets to market 10% or more of their produce.

Farmers' markets also have the distinction of having a disproportionate number of growers marketing 100% of their produce through this market channel. In 2005, 46 of the respondents (17%) indicated that they sold 100% or more of their produce through farmers' markets.

Because the survey's anonymity does not guarantee the same producers respond each year, the actual percentage of farmers' market participation may vary. When compared with a more rapid rate of growth in the number and gross sales at Kentucky farmers' markets since 2002, the 5% annual increase in farmers' market participation suggests that farmers' markets are multiplying as growers participate in multiple markets. This is supported by anecdotal evidence and observations of farmers' market member list information from around the state.

Another likely possibility for the increase in farmers' market sales and participation is a decrease in the number of growers reporting that they market produce from their farm, from 55% in 2002 to 46% in 2005 (FIG 2).

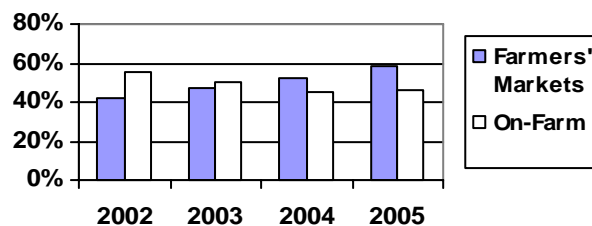
### **Restaurants**

The percent of Kentucky growers selling produce to local restaurants remained static from 2002-2004. However, in August 2004, the Kentucky State Resort Park Restaurants began purchasing fresh produce from Kentucky farmers and interest in selling to restaurants expanded. This opened up a \$500,000 market for fresh produce to growers around Kentucky. State park restaurants also want to source additional fresh product to replace frozen product. This program appeared to be popular with growers, as 16 reported selling to a restaurant for the first time in 2005, and cited the state park restaurants as their market channel. The Restaurant Rewards program also seemed to begin to show some contribution to developing these local markets. Growers frequently reported transportation costs as the most significant barrier to selling to restaurants. A more complete study of the restaurant produce marketing activity is available in the 2006 Restaurant Produce Buyers Survey.<sup>1</sup>

### **Auctions**

The percentage of respondents selling produce through auctions increased slightly during 2005 (15%). This is undoubtedly due to auctions that began in Lincoln, Bath, and Mason counties in 2004. The Fairview Produce Auction, in Christian County, continues to grow in popularity and sales volume. A noticeable trend in 2005 is the number of growers using an auction to market 10% or less of their total produce sales, number (27) and percent of growers (5%) using auctions.

**Figure 2. Percent of Growers Selling Over 10% in Market Channel**



<sup>1</sup> Tim Woods, Matt Ernst, and Jeffrey Herrington, "2006 Kentucky Restaurant Produce Buyer Survey", University of Kentucky, Department of Agricultural Economics Extension Numbered Series: 2006-01, April, 2006

All auctions have the dilemma of attracting enough buyers and sellers to create a vibrant local market. It remains to be seen if a preference for fresher produce and the renaissance toward eating locally produced food will expand far enough in Kentucky to adequately support emerging produce auctions. However, these produce auctions can currently fill a niche as part of a diverse direct and wholesale marketing plan. Growers, especially in areas of newer auctions, appear to be using auctions sparingly.

**CSA's**

Direct marketers have found that Community Supported Agriculture (CSA) can be an economically attractive marketing option, especially in areas with higher per capita incomes. Only three producers responded to this survey indicated that a CSA was currently part of their marketing program. Less than half (42%) of producers indicated that they had even heard of CSA production.

**On-Farm Marketing: U-Pick**

Interest in Pick Your Own (PYO), or U-Pick, continues to be significant. Thirty-five (14%) of the 257 growers responding to the questions about PYO indicated that they are not currently using PYO, but are interested in making it part of their marketing plan in the future. About the same number (33) of growers are currently using PYO.

**Produce Grower Demographics: 2001-2005**

Grower demographics have changed somewhat during the most recent five years. Selected results from previous planting intentions and marketing are summarized here to observe trends across several of these demographic variables.

**Age and Experience**

Significant expansion has occurred in Kentucky's produce industry since 1998. Kentucky's farm operator population continues to age, and this produce expansion has primarily happened on farms operated by older (>50) operators. Responses to questions about age and experience this year, as in previous years, reflect these general assumptions (Table 1). Producer years of experience in growing produce shifted toward more experience after remaining static from 2001-2003 (Table 2), particularly among those newly getting into growing produce. Although the survey represents a smaller percentage of growers for 2004-05, the data show an aging trend.

**Table 1. Surveyed Producer Age, 2001-05**

	<i>Under 30</i>	<i>31-40</i>	<i>41-50</i>	<i>51-60</i>	<i>&gt;60</i>
<b>2001</b>	7%	14%	31%	24%	23%
<b>2002</b>	5%	14%	29%	27%	25%
<b>2003</b>	6%	10%	30%	26%	27%
<b>2004</b>	4%	9%	31%	26%	27%
<b>2005</b>	4%	9%	26%	29%	31%

**Table 2. Years of Experience Growing Produce 2001-05**

	<i>Less than 3</i>	<i>3 to 6</i>	<i>7 to 10</i>	<i>Over 10</i>
<b>2001</b>	25%	23%	14%	38%
<b>2002</b>	15%	32%	15%	38%
<b>2003</b>	15%	33%	13%	38%
<b>2004</b>	6%	28%	15%	48%
<b>2005</b>	9%	28%	19%	42%

***Tobacco Production***

For the past three years, this survey has asked produce growers if they raise tobacco. Responses have been similar for each year: 44 percent in 2001, 46 percent in 2002, and 41 percent of 2003 respondents said they had produced tobacco. For 2004, 45 percent of respondents replied that they had grown tobacco in 2004 (Table 3), while only 23% reported growing tobacco in 2005.

**Table 3. Percent of Respondents Growing Tobacco**

	<i>Grew Tobacco and Produce</i>	<i>Percent Anticipating Tobacco Production in Coming Season</i>
<b>2001</b>	44%	
<b>2002</b>	46%	
<b>2003</b>	41%	
<b>2004</b>	45%	28% of respondents (62% of 2004 tobacco growers)
<b>2005</b>	23%	21% of respondents (93% of 2005 tobacco growers)

***Certified Organic Production***

Certified organic production of fruits and vegetables has decreased in Kentucky since 2001, primarily because of producers unwilling to renew organic certification after changes in certification requirements. However, as in previous years, a significant number of growers (30%) said they were interested in future organic production. Nearby market potential and new administrative support for Kentucky's organic certification process could bode well for growers interested in organic production.

**Conclusions/Outlook**

Primarily fueled by growth in direct marketing, gross sales from Kentucky's produce industry will increase by at least 5% in 2006. Produce continues to emerge as an additional source of income for many Kentucky farms and, as marketing and management expertise are increasing annually, this sector should continue its modest rate of a 5-10% increase in gross sales. Large, private wholesale expansion, particularly in the small fruit sector, could dramatically increase both acreage and sales for produce over the coming five years.

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## Appendix 1. Vegetable Co-Op Acreage Changes<sup>2</sup>

	2006	2005	2004	2003	2002
Broccoli	0	253	70	75	35
Cabbage	44	70	150	175	166
Cantaloupe	0	25	80	78	83
Sweet Corn	10	378	700	718	712
Cucumbers	60	65	61	77	49
Peppers	70	200	310	290	295
Potatoes	0	25	0	150	120
Pumpkins	25	166	90	195	264
Squash (Summer)	36	27	29	41	46
Tomatoes	12	25	52	57	68
Watermelon	0	73	22	20	10
Eggplant	5	10			
Hard Squash	5				
<b>Total Acreage</b>	<b>267</b>	<b>1,317</b>	<b>1,564</b>	<b>2,075</b>	<b>1,848</b>

## Appendix 2. Percent of Growers Reporting 10% or More Gross Sales from Specific Markets

	2002	2003	2004	2005
<b>Farmers' Markets</b>	42%	47%	52%	58%
<b>On-Farm Direct Markets (U-Pick, Farm Stand)</b>	49%	44%	37%	46%
<b>Direct to Grocery</b>	21%	14%	15%	16%
<b>Wholesale, Non Co-op</b>	17%	15%	17%	15%
<b>Wholesale, Cooperatives</b>	17%	15%	11%	8%
<b>Direct to Restaurants</b>	5%	7%	7%	17%
<b>Auctions</b>	9%	8%	10%	16%
<b>CSA/Subscription</b>	3%	2%	2%	1%

## Appendix 3. Percent of Growers Reporting Any Quantity of Gross Sales from Specific Markets

	2002	2003	2004	2005
<b>Farmers' Markets</b>	47%	53%	55%	63%
<b>On-Farm Direct Markets (U-Pick, Farm Stand)</b>	55%	50%	45%	46%
<b>Direct to Grocery</b>	28%	21%	20%	16%
<b>Wholesale, Non Co-op</b>	20%	17%	20%	15%
<b>Wholesale, Cooperatives</b>	18%	15%	11%	8%
<b>Direct to Restaurants</b>	14%	12%	14%	17%
<b>Auctions</b>	9%	9%	12%	16%
<b>CSA/Subscription</b>	3%	3%	2%	1%

<sup>2</sup> Cooperatives or cooperative facilities

## Appendix 4. Vegetable and Fruit Planting Intentions for Kentucky, 2006

	2002 USDA Estimated Acreage (Ag Census)	2005 Acreage Estimate	2006 Acreage Forecast	2005-06 Percent Change
<b>Vegetables</b>				
Asparagus	44	40	45	13%
Beans, Snap	541	200	405	103%
Beets	8	10	45	350%
Broccoli	49	250	260	4%
Cabbage	262	200	225	13%
Chinese Cabbage	25	<10	<10	--
Cantaloupes	575	500	460	-8%
Corn, Sweet	2010	2000	2664	33%
Corn, Ornamental	N/A	40	159	298%
Cucumbers, Fresh	146	120	142	18%
Eggplant	2	25	25	0%
Garlic	8	10	27	170%
Greens (Collards, Kale, Mustard, Turnip)	81	80	66	-18%
Lettuce - Leaf, Head, & Romaine	14	20	18	-10%
Lettuce (Greenhouse)	N/A	10	<10	--
Okra	12	15	20	33%
Onions (Dry & Green)	13	25	30	20%
Ornamental Veggies.	N/A	45	45	0%
Peas	6	10	45	--
Peppers, Bell	348	325	435	34%
Peppers, Jalepeno	52	55	125	127%
Peppers, Other	N/A	40	85	113%
Potatoes, Red	N/A	130	60	-54%
Potatoes, White	N/A	275	75	-73%
Pumpkins	1524	1000	1260	26%
Squash, Summer	136	105	145	38%
Squash, Winter	N/A	25	40	60%
Sweet Potatoes	N/A	25	60	140%
Tomatoes, Field	911	575	615	7%
Tomatoes, Greenhouse	N/A	10	15	--
Watermelons	450	500	435	-13%
Herbs	12	70	20	-71%
Other Vegetables	69	65	60	-8%
<b>Fruit</b>				
Apples	1920	1800	980	-46%
Blackberries	86	110	130	18%
Blueberries*	61	62	120	94%
Grapes**	489	250 Bearing	410	64%
Peaches*	408	500	600	20%
Pears	74	50	50	0%
Raspberries*	20	40	30	-25%
Strawberries	216	210	175	-17%
Other Fruits	26	25	5	-80%
<b>Total Vegetable Acres</b>	<b>7,298</b>	<b>6,810</b>	<b>8,131</b>	<b>+19%</b>
<b>Total Fruit Acres</b>	<b>3,300</b>	<b>3,047</b>	<b>2,500</b>	<b>-18%</b>
<b>Total Produce Acres</b>	<b>10,598</b>	<b>9,847</b>	<b>10,611</b>	<b>+8%</b>

\* Survey results adjusted from additional information from UK Fruit Extension Specialists

\*\* 505 Acres of grapes planted