

Marketing Highbush Blueberries in Kentucky

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Introduction

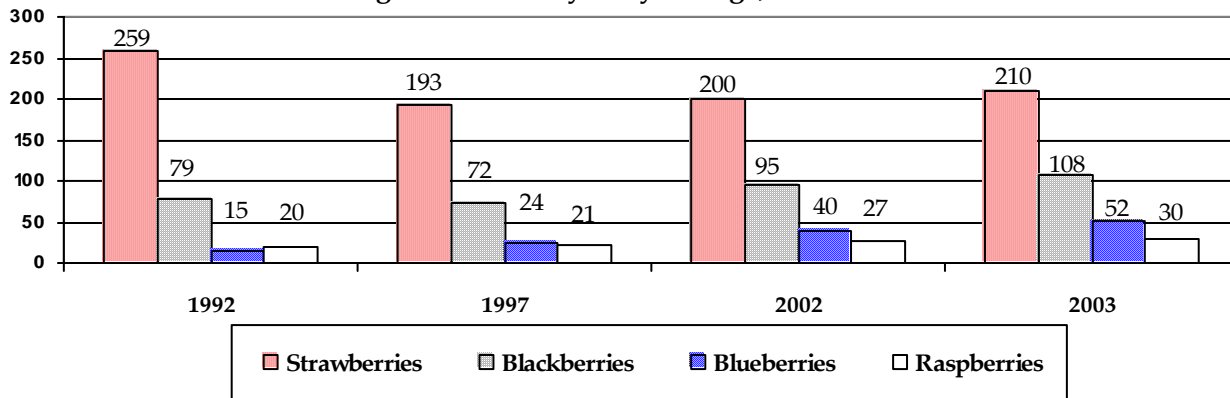
Berries are generating much excitement as a new and profitable crop in Kentucky. Blueberries and blackberries have led the way for a significant increase in Kentucky's commercial berry acreage since 1997 (Figure 1). While this publication focuses on marketing blueberries in Kentucky, many of the principles and strategies presented here can be applied to blackberries, strawberries and other small fruits.

Blueberry market research in Kentucky was conducted during the 2002 and 2003 seasons. This research was conducted through funding provided by the [University of Kentucky New Crop Opportunities Center](#), with additional assistance of a Southern Region Sustainable

Agriculture Research and Education ([SARE](#)) On-Farm Research Grant #OS03-014. Results from this research contributed much to information reported in this publication.

This publication focuses on marketing fresh highbush blueberries, the varieties which have been successfully tested for commercial production in Kentucky. There may also be potential for commercial cultivation of southern highbush and rabbiteye blueberry varieties in some regions of Kentucky. Future research by the University of Kentucky's [Department of Horticulture](#) will determine the commercial viability of other blueberry varieties in Kentucky.

Figure 1. Kentucky Berry Acreage, 1992-2003



Blueberries: A Native New Crop

Blueberries are a native North American fruit. This is a relative rarity among commercial fruit crops. Traditionally, blueberries have been especially enjoyed by consumers in higher producing areas of heavier production like New England and the Upper Midwest. Consequently, some Kentucky producers have observed that, while many Kentuckians enjoy blueberries, the crop's immediate appeal is greater to persons originally from areas where blueberry production is more traditional.

Cultivated blueberries, planted on soil with a pH of 4.5-5.2 that is properly prepared and cared for, can thrive in Kentucky. More information about growing and caring for commercial blueberry plantings can be obtained directly from the University of Kentucky [Department of Horticulture](#) and in Extension publication HO-60, [Growing Highbush Blueberries in Kentucky](#) (these are available through the New Crop Opportunities Center link below).

Resource Link

New Crop Opportunities Center
www.uky.edu/Ag/NewCrops

A positive market environment for fresh blueberries, along with a climate conducive to the crop's growth, presents potential long-term profits for Kentucky producers willing to invest the considerable capital, land, labor, and management necessary for establishing a commercial crop (Table 1). *However, blueberry bushes require 3-5 years to begin significant fruit production after planting.* Producers need to realize that there will be little to no cash flow from their blueberry planting until the bushes reach bearing age.

Market Highlight: Blueberry Consumption

Blueberries contain some of the highest amounts of antioxidants among fruits and vegetables.¹ Antioxidants have been demonstrated to have positive health benefits including cancer prevention and reducing effects of aging. These health effects, and the increased popularity of fresh berries, have contributed to increase in fresh blueberry consumption in recent years.

Per capita blueberry consumption in the US is estimated to have increased from 13.2 oz per person in 1997 to 15.9 oz in 2001. Fresh blueberry consumption appears to be leading the way for this increase, with consumption increasing from 0.20 lb per capita in the early 1990s to 0.34 lb per capita in 2000-2002.² About 56% of the U.S. blueberry crop went to the fresh market in 2002. This is up significantly from 48% in 2001 and 45% in 2000.³

For more information, visit the [US Highbush Blueberry Council](#)
www.ushbc.org/index/html

Sources

¹ "Feeling Good About The Blues." North American Blueberry Council.

<http://www.blueberry.org/publications/nutrition.pdf>

² Susan Pollack and Agnes Perez. *Fruit and Tree Nuts Outlook*. USDA/ERS FTS-305. July 30, 2003.

<http://www.ers.usda.gov/publications/fts/jul03/fts305.pdf>

³ "Blueberry Health Message Drives Interest and Demand." *The USHBC Bluespaper*. U.S. Highbush Blueberry Council, December 2002, pg. 1.

Table 1. 2002 KY Blueberry Returns For 1 Acre (8500 pints in full production year)

System	Estimated Establishment Cost Per Acre (Cash Outlays Until Positive Cash Flows are Generated)	Estimated Annual Return to Owner Land, Labor, and Management (Full Production Year)	Estimated Present Value of 10-Year Cumulative Return (9% Discount Rate)	Estimated Payback Period (Return to Owner Land, Labor & Mgt.)
Wholesale/Retail \$1.50/pt	\$4,811	\$5,873	\$12,010	5 ½ Years
Pick Your Own 80% @ \$1.25/pt PYO 20% @ \$1.50/pt	\$4,598	\$8,325*	\$22,840	5 Years

* PYO return assumes owner/operator supervision of PYO customers

Source: “2002 Blueberry Cost and Return Estimates: Summary and Assumptions”

[UK New Crop Opportunities Center](http://www.uky.edu/Ag/NewCrops/blueberrysummary.pdf)

<http://www.uky.edu/Ag/NewCrops/blueberrysummary.pdf>

Market Channels

A *market channel* is the method or way that product gets from the producer to the consumer. There are numerous market channels for blueberries, both on and off the farm. How blueberries are marketed will partly depend on the producer’s personality, available harvest labor, and farm location.

Producers selling their berries directly to the consumer will capture the most profit per acre of production. Pick Your Own markets may be the most profitable direct market for many producers and will be the first market summarized here. In addition to direct market channels, some wholesale markets are available to Kentucky producers. Wholesale markets could expand as blueberry acreage increases.

Direct Markets

The three direct markets primarily available for Kentucky berry growers are Pick Your Own (PYO), on-farm retail, and farmers’ market. This section will identify considerations for selling blueberries into each of these direct markets.

Pricing

One of the most common questions involved in direct marketing farm products is that of pricing. A frequent question among farm entrepreneurs is: how much should I sell my product for? Answers to this question are not always easy, but there are at least a few general guidelines that can assist producers of new crops.

Market Highlight: KY Blueberry Markets

These market channels are all used by Kentucky growers to successfully market blueberries:

- >Pick Your Own
- >On-farm retail
- >Farmers’ markets
- >On-farm wholesale
- >Local grocery
- >Produce auction
- >Direct to restaurant

Direct Market Pricing: Know The Costs

The first step in pricing a product is to **know how much the crop cost to produce**. Blueberries are a perennial crop, so costs are incurred two to four years before any berries are harvested. Tracking blueberry costs will require more recordkeeping than an annual crop—but those records will pay off when it comes time to setting your price. Financial profitability is never realized if your price is less than it cost you to grow the crop. Table 2 (following page) provides a sample worksheet for how to estimate your cost of production.

One pricing strategy is to set retail prices based on similar crops, such as raspberries or blackberries. In less populated regions, local products may use prices of similar goods at local groceries as the basis for their price. During early and mid-June, pints of fresh blueberries usually fall in the \$1.60-\$2.00 range at many Kentucky retailers. The Kentucky season is early enough for farm fresh prices to mimic these higher prices.

For direct marketers, a good rule of thumb is to simply listen to your customers respond to the price they are paying. If no one is complaining about the price they are paying, there is probably no problem with your price—in fact, it might be too low! If a

majority of your customers are complaining about the price you're charging, then the price is probably too high. You would normally expect a few people to comment adversely about the price in a direct market situation—and as long as only a few people are complaining, the price that you have set is probably “right on.”

You will also want to pay attention to the demand for your product. If you are selling all the berries you have at a higher price than some customers are willing to pay, there is certainly no reason to lower your price—you would not have the product to supply that meets the demand for lower-priced berries!

A simple strategy for many direct marketers is to fall in a price range where just a few customers are commenting or complaining about the price being too high. There are certainly more sophisticated means of setting prices, but this is a good rule of thumb overall. And remember: it is much easier to lower your price than to raise it. The smart marketer will pay attention to the demand and “willingness to pay” for their product and adjust prices to meet those given demands.

Resource Links

Detailed multi-year cost and return estimates for highbush blueberries in Kentucky were developed by the University of Kentucky New Crop Opportunities Center in 2002. These budgets are available in PDF format at www.uky.edu/Ag/NewCrops/decision.html

2002 Kentucky Blueberry Cost and Return Estimates Summary
www.uky.edu/Ag/NewCrops/blueberrysummary.pdf

2002 Kentucky Highbush Blueberry Production Budgets—Wholesale/Retail Marketing
www.uky.edu/Ag/NewCrops/blueberrybudget.pdf

2002 Kentucky Highbush Blueberry Production Budgets—Pick Your Own Marketing
www.uky.edu/Ag/NewCrops/blueberrypyo.pdf

Table 2. Blueberry Costs and Returns Per Acre, Full Bearing Year

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS					
Blueberries	8500	pints	\$ 1.50	\$12,750.00	
1. Gross Returns				\$12,750.00	
PRODUCTION COSTS					
2. Fungicide	5	gallons	\$ 3.20	\$ 16.00	
3. Fertilizer	376	lbs	\$ 0.10	\$ 37.60	
4. Herbicide (Spring)	1	gallon	\$ 76.93	\$ 76.93	
5. Pollination	1	hive	\$ 40.00	\$ 40.00	
6. Fungicide	1	acre	\$ 74.13	\$ 74.13	
7. Insecticide	1	acre	\$ 16.22	\$ 16.22	
8. Herbicide (Fall)	8	lbs	\$ 9.67	\$ 77.36	
9. Irrigation	5	months	\$ 15.00	\$ 75.00	
10. Variable Machinery Costs	1	acre	\$ 40.44	\$ 40.44	
11. TOTAL PREHARVEST COSTS (Sum of lines 2 to 10)				\$ 453.68	
HARVESTING AND MARKETING COSTS					
12. Hired Labor	340	hours	\$ 9.00	\$ 3,060.00	
13. Plastic Clamshells	8500	pints	\$.10	\$ 850.00	
14. Marketing Costs	10%	gross	\$12,750.00	\$ 1,275.00	
15. Refrigeration Costs	30	days	\$ 1.19	\$ 35.70	
16. TOTAL HARVESTING & MARKETING COSTS (Sum of lines 12 to 15)				\$ 5,220.70	
17. TOTAL VARIABLE COST (Line 11 + Line 16)				\$ 5,674.38	
18. RETURN ABOVE VARIABLE COSTS (Line 1 – Line 17)				\$ 7,075.62	
FIXED COSTS					
19. Fixed Machinery Costs	1	acre	\$ 38.22	\$ 38.22	
20. Fixed Costs on Irrigation System	1	year	\$ 348.00	\$ 348.00	
21. Fixed Costs on Cooler System	1	year	\$ 341.00	\$ 341.00	
22. Pest Control	1	year	\$ 220.00	\$ 220.00	
23. TOTAL FIXED COSTS (Sum of lines 18 to 21)				\$ 947.22	
24. TOTAL COSTS (Line 17 + Line 22)				\$ 6,621.60	
25. RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT. (Line 1 minus Line 24)				\$ 6,128.40	
26. Operator/Unpaid Labor	36	hrs	\$ 10.00	\$ 360.00	
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ 5,525.05	
Breakeven Return Per Pint To Land, Capital & Mgt. (Line 24 + Line 26)/Pints Per Acre				\$ 0.82	

Direct Markets: Pick Your Own

The Three L's of Pick Your Own

There are three major areas that producers specifically interested in Pick Your Own (PYO) or U-Pick marketing should consider. We call these the “Three L's of Pick Your Own:” **labor, liability, and location**. These areas are summarized here, focusing on their application to blueberry marketing.

Labor

Blueberries are a labor intensive crop to harvest. The best blueberry pickers can pick 20-25 pints of larger blueberries per hour, resulting in 300-400 labor hours needed to harvest fruit from an acre of mature blueberry bushes. Pick Your Own (PYO) marketing enables producers to decrease their harvest labor need because customers provide their own harvest labor. This significantly lowers the producer's breakeven price, allowing the producer to sell berries at a much lower price yet realizing as much, or more, profit.

Many PYO customers also place added value on the experience of visiting a farm. This can also help the producer to generate a higher profit margin through PYO marketing than from marketing pre-picked fruit. Some Kentucky orchard and bramble producers have successfully used PYO blueberries to increase the number of visits their customers make to their on-farm market.

The first blueberry producers utilizing PYO marketing in Kentucky have realized prices of \$1.75 to almost \$3.00 per pint. As seen in Table 3, these prices can generate significantly more returns to the producer's



Customer picks their own blueberries at Reed Valley Orchard, Paris, KY.

land, labor, and management time than production with hired harvest labor. These higher returns are due almost entirely to eliminating hired harvest labor cost.

Liability

A blueberry producer interested in PYO marketing will need to make several management decisions different than the producer who hires harvest labor. Foremost among these concerns is to obtain adequate liability insurance to manage the increased risk of having on-farm visitors. Farm insurance policy holders who are adding a PYO blueberry enterprise as a small percentage of their operation can usually add adequate liability coverage to their existing policy at a minimal charge. Most insurance companies offer an “incidental business activities endorsement” at a modest additional premium. Such coverage is critical if PYO customers are coming onto the farm.

Remember:

The best way to determine your operation's liability needs is completing an insurance needs assessment with your insurance agent.

(Liability)

Annual meetings with your insurance agent are critical to monitoring your liability risk. The best place for this meeting is at the farm. This gives the agent an opportunity to evaluate the operation and offer an “outsider’s” view into potentially risky situations on the farm. Liability issues involved in inviting customers onto your farm can affect a wide range of farm decisions ranging from where you house livestock to where your customers might use bathroom facilities. A simple review of your farm with an insurance agent or other risk management specialist can go a long way in preventing liability problems.

Resource Link
“Growing Highbush Blueberries in Kentucky”
<http://www.ca.uky.edu/agc/pubs/ho/ho60/ho60.htm>

Location

It is important to remember that, if you decide to invite customers to your farm to harvest berries, the farm becomes a retail business. It has become a cliché that the three most important things about a retail business are location, location, location— but it is true. No matter how few and far between PYO blueberry farms are in your area, your farm’s location and accessibility will have some effect on people’s decisions to visit your farm.

An ideal location for a PYO berry farm is on a well-traveled byway near a populated area. If your farm is located on or near the outskirts of town, you have a geographical advantage in starting a PYO blueberry business. Accessibility to your farm will allow some customers who might not travel long distances to pick their own berries to be more likely to visit your farm.

Table 3. Pick Your Own Blueberry Profitability at Varying Prices and Yields \$/Acre Return to Owner Land, Labor & Mgt.—Full Production Year Assumes 80% production goes to PYO, 20% to retail/wholesale

\$1.00/Pint Wholesale							
	Total Yield (Pints)						
PYO Price/Pint	7000	7500	8000	8500	9000	9500	10,000
\$0.75	3304	3635	3966	4297	4628	4959	5290
\$1.00	4631	5057	5483	5908	6334	6760	7186
\$1.25	5958	6478	6999	7520	8040	8561	9081
\$1.50	7285	7900	8515	9131	9746	10361	10977
\$1.75	8612	9322	10032	10742	11452	12162	12872
\$1.50/Pint Wholesale							
	Total Yield (Pints)						
PYO Price/Pint	7000	7500	8000	8500	9000	9500	10,000
.75	3967	4346	4724	5103	5481	5860	6238
1.00	5294	5768	6241	6714	7187	7660	8134
1.25	6621	7189	7757	8325	8893	9461	10029
1.50	7948	8611	9274	9936	10599	11262	11925
1.75	9275	10032	10790	11547	12305	13063	13820

Resource Link:

The Legal Guide For Direct Farm Marketing

"Many farmers with experience in pick-your-own ventures," writes Drake University agricultural legal expert Neil Hamilton, "agree that no matter how careful a farmer is customers can find creative ways to injure themselves."

There are a wide variety of legal issues involved when farm producers start marketing products direct to consumers. In 1999, Hamilton authored the most comprehensive resource available to help producers think through the legal issues associated with marketing farm products direct to the consumer. *The Legal Guide For Direct Farm Marketing* is a grower-friendly resource that outlines many issues critical for PYO or other direct marketing efforts.

The Legal Guide For Direct Farm Marketing is available to order for a reasonable fee from the Drake University Agricultural Law Center at:

<http://www.law.drake.edu/centers/agLawCenter> or 515-271-2065.

(Location)

Successful operation of a PYO operation does not depend entirely on your farm's location. If you market the highest quality product and experience, people will search you out even on a "back forty." But if your farm is a little more off the beaten path, it becomes even more important that you answer some basic questions for all PYO operations. Such questions include:

- Where is the nearest farm that is offering, or planning to offer, PYO/U-Pick blueberries?
- Are there any PYO blueberry operations within a 50-mile radius of my farm?
- How many people live within a 50-mile radius of my farm?
- Is there any existing demand for PYO blueberries in my area?

Is there a local market for blueberries that my U-Pick customers miss or pick over? If there are nearby farms offering PYO blueberries, you will want to find out what their demand for PYO is like. Some

producers in Kentucky have discovered that PYO blueberry demand is so great in their

area that they can work with neighboring farmers to develop a "U-Pick cluster," a group of nearby farms that cooperate with each other to ensure all their customers have product demanded. Even if your farm is not the most accessible to the public, demand for a quality product can drive people to come to your farm to pick berries.

No matter where your PYO operation may be, clear signage and advertising on and off the farm will ensure your success. You can never let people know enough how to get to your PYO blueberry patches. Doing all you can to advertise your farm's location, as well as maintaining easy access roadways into your farm, will help ensure marketing success.

Not All the Berries Get Picked!

The customers who come to your farm to pick their own berries will not pick all the ripe fruit. They will miss some berries that

more experienced pickers would pick. Weather or other factors may not allow customers onto your farm when some fruit is ripe. There are many reasons that a PYO berry patch needs to be “picked over” after customers are done.

University of Kentucky budgets are designed with the assumption that 20% of the fruit from a PYO blueberry operation is not picked by the customer. You will maximize profitability from a PYO blueberry operation when you will have another marketing option for the fruit that does not get harvested by your PYO customers.

Marketing for the Future

As with any other product, the customer is the most important in a PYO berry operation. Many PYO farms develop a loyal customer base that repeatedly visits from year-to-year. As your blueberry operation develops this kind of customer

base, it becomes even more important that you know your customers and know them well.

Knowing your customers allows you to develop a friendly rapport with them. It also allows you to understand what the customer is looking for when they come to visit your farm. There may be products that they are interested in purchasing along with blueberries. There may be other crops that they are interested in coming to your farm to pick. Regularly talking with your customers, or even having a written survey for them to respond to, can help you understand what your customer is looking for during their farm visit.

Finally, it is important to remember that using PYO marketing means people will be coming onto your farm. This may mean that you sacrifice some privacy, give up some weekends, and make other adjustments in your schedule or lifestyle to accommodate your customers.

Resource Link: Market Feasibility Study

You don't need to hire a high-powered market research firm to do a simple feasibility study of your local market potential for blueberries or other produce. Whether you're choosing to market berries via PYO, on-farm retail, farmers' market, or wholesale, you can start to determine what the market is yourself.

There are several simple questions you can answer about your operation and your market that can help you start marketing well before your blueberry bushes start producing. A few of these questions are:

- Am I willing to spend as much effort in marketing as in production?
- Are there people in my local area who have expressed desire to buy blueberries?
- How are people interested in buying my product—on the farm, at a farmers' market, through a local grocery or restaurant, or at some other location?
- Do people in my area already like blueberries, or would I also have to introduce them to the product?

These and other questions can help you develop a simple plan for marketing blueberries. If you find that you cannot find or decide where or who you are going to market your berries to, you will need to rethink blueberry production for your farm—or do more research to determine your market.

A good resource that can help guide you through the marketing and enterprise planning process for a new crop like blueberries is [A Primer for Selecting New Enterprises for Your Farm](http://www.uky.edu/Ag/AgEcon/pubs/ext_aec/ext2000-13.pdf) by Tim Woods and Steve Isaacs, farm marketing and management specialists at the University of Kentucky. Their publication is accessible on-line at http://www.uky.edu/Ag/AgEcon/pubs/ext_aec/ext2000-13.pdf

Pick Your Own: Selected Advantages and Concerns

Advantages

- Less required harvest labor
- Potentially higher returns
- No/Lower packaging costs
- On-farm visits can result in additional produce purchases
- Diversifies farm marketing plan and business structure

PYO Concerns

- Producer management time required
- Potential damage to blueberry bushes from customers
- Liability risk of hosting on-farm visitors
- Possibly greater start-up/advertising costs
- Farm location can affect decisions to visit your farm
- Must be willing/flexible to sacrifice your time and privacy to PYO customers

We will now move to other popular ways to directly market blueberries to consumers in Kentucky: direct sales of pre-picked berries on or near the farm and at farmers’ markets.

Other Direct Markets

On-Farm/Farmstand Retail

There is generally a very high level of demand for fresh fruit in many community markets. Where supplies are limited, this can result in very strong prices. Customers surveyed in 2002 and 2003 at the Lexington Farmers’ Market and at a local grocery in rural southern Kentucky indicated that only about half of retail blueberry customers were interested in picking their own blueberries at a nearby farm (Table 4). Some blueberry customers

will not be interested in picking their own berries but will still want the freshness and quality benefits associated with purchasing locally grown blueberries. To satisfy this segment of Kentucky blueberry customers, producers can sell pre-picked blueberries directly to the consumer both on and off their farm.

Direct Marketing On the Farm

Many of the liability concerns of Pick Your Own marketing also apply when customers come to your farm to purchase blueberries that are already picked. There are also greater production costs incurred with pre-picked berries, especially labor and the cost of a container to sell the berries in. You will need to be sure that you can sell your

Table 4. Kentucky Blueberry Customer PYO Interest and Willingness to Pay

	2002		2003	
	Lexington	Metcalfe County	Lexington	Metcalfe County
Interested in Local PYO	58%	42%	53%	44%
Not Interested	42%	58%	47%	56%
\$__/lb. willing to pay for PYO	\$2.13	\$1.24	\$2.19	\$1.19

blueberries at a price that still satisfies your customer while covering these additional costs of production.

In addition to the cost of harvest labor, marketing blueberries on your farm may also involve a cost for containers. For a blueberry yield of 6,000 pounds per acre, this cost can range from \$400 for traditional one-pint green fiber pulp berry containers to \$800 for more upscale paperboard or wooden berry tills. The UK production budgets assume that plastic clamshell containers are used at a cost of \$0.10/pint. Producers can often realize significant savings by purchasing packaging in bulk. You may want to cooperate with other berry producers in your area to gain bulk purchase discounts on packaging.

Cooling

Few Kentucky producers who have started marketing blueberries are equipped with cooling equipment. Blueberries are a bit more tolerant to a lack of cooling than many other berries which must be cooled very rapidly after leaving the field to maintain quality. However, cooling is **always** essential to maintain blueberry quality beyond picking day. Coolers on your farm to preserve your produce quality can be a wise investment for the successful marketer. Berries keep best at 32°F and 85% relative humidity. Proper cooling can extend the shelf life of blueberries up to two weeks. Blueberries fresh off the bush will keep for two weeks at 32°F, but only two days at 70°F!

Resource Link: Berry Packaging Preferences

<http://www.ca.uky.edu/agc/pubs/pr/pr488/3%20small.HTM>

Some simple changes in berry packaging were found to affect the amount of blueberries purchased by customers at on-farm retail stores and farmers' markets in Kentucky during 2003.

Using packaging purchased with funds from the Southern Region SARE On-Farm Research grant "Kentucky Blueberry Market Development," different kinds of quart packaging were evaluated side-by-side at Reed Valley Orchard in Paris, KY. Consumers were asked what they thought of traditional green fiber pulp berry containers, wood containers, and attractive white and brown "paperboard" containers made out of similar material used in cereal boxes.

More customers (41%) responded that they liked the paperboard containers better than the fiber pulp containers. The berries were being sold by weight, and store owners noted that the quart paperboard containers used held slightly more berries without appearing overly full than the quart fiber pulp containers. They noted, however, that berries in paperboard containers settled overnight to appear less than full.

The big hit in blueberry packaging at the on-farm retail stand, as well as in test marketing at the Lexington Farmers' Market, was a 1/8-peck (three pint) wooden basket with sturdy handle. With a blueberry recipe attached calling for three pints of berries, the basket contributed a packaging cost of \$2.00. The basket was so popular with consumers that they were willing to pay the cost for three pints of berries and the extra \$2.00 just to get an attractive container!

Before introducing the basket, only one of 104 blueberry customers surveyed at the farmers' market bought more than two pints (one quart) of blueberries. The basket was an example of how savvy packaging strategies can help increase the *volume* of product an individual customer is willing to purchase at the retail level.

For a more complete report, see the article titled "2003 Berry Packaging Consumer Evaluations" in University of Kentucky Extension publication PR-488 [2003 Fruit and Vegetable Crops Research Report](#).

Blueberries sold at the farm in Kentucky can also benefit growers who are already marketing produce at their farm or orchard. The Kentucky blueberry season starts at the first weeks of June in southern Kentucky and in early to mid-June in central and northern Kentucky—before most brambles (raspberries and blackberries) are ripe for picking. Blueberries can attract existing customers to your farm market or farm stand during a period of the season when strawberries have ended and other fresh fruit is still ripening.

Direct Marketing at Farmers' Market

There are over 80 farmers' markets around Kentucky. These markets range in size from tri-weekly municipal markets to weekly markets in smaller towns. Farmers' markets serve as a major market channel for urban and suburban residents to purchase farm-fresh produce without traveling to the farm.

Since customers are looking for farm fresh product at farmers' markets, they are often willing to pay premium prices. Blueberry prices at Kentucky farmers' markets in 2003 ranged from just under \$2.00 per pint to over \$3.50 per pint in municipal markets. Farmers' markets vendors at large and small Kentucky markets have reported very strong demand for quality blueberries—even when fresh berries begin arriving in grocery stores from New Jersey and Carolina markets. This makes farmers' markets a potentially lucrative blueberry market channel.

Resource Link

"Kentucky Blueberry Markets Bursting—Consumer Survey Shows Continued Strong Demand"

In 2003 *New Crop Opportunities Research Report*
<http://www.ca.uky.edu/agc/pubs/pr/pr483/pr483.htm>

Blueberry producers willing to invest the time involved in attending farmers' market can usually gain significantly higher prices at market than at the farm. Farmers' markets also offer additional potential for value-added blueberry products (like baked goods) and organic blueberries.

Farmers' Market Wholesale

Even if you are not a vendor at a farmers' market, you may be able to tap into this market channel by partnering with someone who does sell at a farmers' market. Some markets in Kentucky allow for market vendors to sell produce that is grown on other farms. If your local area market allows this, and you can work a suitable purchase agreement with one of the vendors, you may be able to capture a price somewhere between a wholesale berry price and an on-farm retail price for pre-picked berries.

WHOLESALE MARKET CHANNELS

Local Grocery

The most popular current *wholesale* market channel for blueberries and other small fruit crops in Kentucky is selling to local, usually independent, grocery stores. Local groceries are often willing to work with individual producers who are able to supply a consistently fresh, high quality

Resource Link

The Kentucky Department of Agriculture has a marketing specialist dedicated to developing farmers' markets in Kentucky. You can obtain more information about marketing at farmers' markets by accessing their Web site:

http://www.kyagr.com/mkt_promo/hort/programs/hort/farmer_mkt/index.htm

product. In Edmonton, KY, CBFoods has featured Metcalfe County blueberries in-season since 2001. Other independent groceries around the state have expressed interest in handling blueberries once local production reaches levels able to supply berries in-season.

There are several benefits for producers in working with a local grocery to establish a wholesale market. First, a relationship may already exist between the producer and the store owner, manager, or produce manager. The producer may already shop at the store or personally know the people working there. This relationship is critical to successfully marketing to local retail stores.

A second benefit is that the transportation distance to these stores is usually minimal. This saves the producer from making lengthy trips to deliver berries for market and can eliminate the need for cooling the berry product. Berries can be picked and delivered to the store the same day—grocery stores have coolers and, often, cold display areas that can extend the shelf life of the product.

Producers initially attempting to wholesale blueberries at local groceries will also recognize differences in this market and farm retail markets. Groceries will often

require or prefer clamshell packaging that is similar to other berries they are selling. These plastic containers can be slightly more expensive than open paper or paperboard containers sold at the farm. The grocery may also want berries shipped in corrugated cardboard flats, which hold 12 pints of berries, for more convenient transport and storage.

Producers selling to a nearby grocery who are also selling fresh pre-picked blueberries on their farm will also want to realize that access to product at a grocery may reduce the number of people coming to the farm to purchase blueberries. On-farm and local grocery retail prices for the same product should therefore end up being very similar.

Producers wanting to minimize investment in a blueberry enterprise may be able to bypass the need for a large cooling system by a creative mix of PYO, farm fresh sales and local grocery wholesaling. However, on-farm cooling facilities still eliminate the uncertainty of what to do with extra berries.

Restaurants

Restaurants are another popular wholesale local market channel. Restaurants might feature local blueberries in desserts or as fresh fruit in salads and buffets. High quality fruit is extremely important to a

Calculating Wholesale Market Profitability		
Do you have an opportunity to wholesale berries? Use this worksheet to estimate your actual cost of delivering a wholesale product:		
Breakeven price for PYO or on-farm retail		\$ _____/pint
PLUS:	Value of additional labor time to pack berries	\$ _____/pint
	Cost of additional berry packaging	\$ _____/pint
	Cost of transportation to market	\$ _____/pint
EQUALS:	Breakeven Wholesale Price	\$ _____

(Restaurants)

restaurant or bakery, especially if its customers are part of the fine-dining clientele.

Blueberry growers may find that local restaurants prefer delivery of berries in bulk containers. Blueberries may be packaged and transported under normal conditions in containers up to 10 pounds in weight without damage occurring to the fruit.

Typically, these containers have included five and ten pound corrugated boxes specifically designed for foodservice markets. This kind of packaging results in a fairly low packaging cost per pound and most foodservice buyers are less interested in small unit displays. Nationally, two and three pound clamshell containers have also become popular for blueberries among both restaurants and some higher-use retail consumers.

Fairview Produce Auction—“Where Quality Sells”

Through a Southern Region SARE On-Farm Research Grant, approximately 1,700 pounds of blueberries in six different kinds of packages were test marketed at the Fairview Produce Auction in 2003. The volume of blueberries generated considerable buyer interest, especially during the first day of marketing when two 10-lb boxes brought \$24 each!

After the initial excitement over blueberries died down, blueberries still sold on the auction for strong wholesale prices (\$1.20-\$2.84 per pound) throughout the season. Blueberries packaged in the traditional 1-pt clamshells in 12-pt corrugated cardboard flats brought the strongest prices throughout the season. Quart clamshells, sold in flats of six, were also popular. Bulk packages (2.5 lb, 5 lb, 10 lb) were also tested. These generated slightly lower prices per pound above package costs, but also involve less labor to pack.

The blueberries used in 2003 were sourced from south central Kentucky, approximately 125 miles from the auction. The blueberries a variety of buyers, including those from Nashville, TN, wholesale markets. Growers closer to the auction who are able to minimize transportation costs could capitalize on this market in future years.

Table 6. Fairview Produce Auction Blueberry Prices, 2003

Container	Price Range Per Container	Price Range Per Pound	Volume	Packaging Cost Per Pound	Returns Above Packaging Cost
½-pt Plastic Clamshell	\$0.90	\$1.44	60	\$0.35	\$1.09
1-pt Plastic Clamshell	\$1.30 - \$2.42	\$1.63 - \$3.03	1092	\$0.17	\$1.46 - \$2.86
1-qt Plastic Clamshell	\$3.25- \$3.75	\$2.03 - \$2.34	96	\$0.20	\$1.83 - \$2.14
2.5 Lb. Clamshell	\$3.75 - \$4.50	\$1.50 - \$1.80	44	\$0.20	\$1.30 - \$1.60
5 Lb. Corrugated	\$6.50 - \$10.00	\$1.30 - \$2.00	49	\$0.10	\$1.20 - \$1.90
10 Lb. Corrugated	\$15.00 - \$19.80	\$1.50 - \$1.98	30	\$0.08	\$1.42 - \$1.90

Produce Auction

Producers within a 150-mile radius of Fairview, in western Kentucky, can market produce at the Fairview Produce Auction. There are also other produce auctions emerging in Kentucky.

Produce auctions provide a wholesale market that can fluctuate throughout the season, based primarily on volume of product and buyers present on any given day. Auction buyers are often willing to pay higher prices for higher quality produce. For this reason, producers using a produce auction should be extremely careful to monitor the quality of their produce as it is shipped to the auction.

A Southern Region Sustainable Agriculture Research and Education (SARE) On-Farm Research Grant provided funds to assist in test marketing a small volume (1,700 pounds) of blueberries at the Fairview Produce Auction in 2003. Results of this test are found on the following page. The higher volume of blueberries was viewed very favorably by the produce auction manager and buyers in 2003. There appears to be greater wholesale market opportunities for producers willing to incur the price uncertainty and rewards associated with selling produce at this auction.

Blueberry Market Channels: Summary of Selected Advantages and Concerns

<i>DIRECT/RETAIL</i>	Advantages	Concerns
Pick Your Own	Less Hired harvest labor Potential profitability	Liability Location
On-Farm/Farmstand Retail	Transportation to market minimized Potentially higher priced	Liability Harvest labor
Farmers' Market	Potentially more customers	Marketing time Cooling & Presentation
<i>WHOLESALE</i>		
Local Grocery	Less transportation Same-day delivery may eliminate on-farm cooling	Product quality Standard packaging
Chain Grocery	Higher volume orders	Product liability Packaging Delivery
Farm Market Vendor	Potentially higher wholesale price	Producer gives up retail profit
Restaurant	Strong niche market Lower volume wholesale	Delivery Possibly stringent quality
Produce Auction	Strong wholesale prices in western Kentucky	Diverse buyers Geographically limited market in KY

Summary

Blueberries and other small fruit can contribute significantly to the profitability of a farm. The potential returns when these crops are established using proper production techniques and wisely marketed rank at or above many diversification options.

There are many marketing options, both retail and wholesale, that exist for small fruit in Kentucky. These options should all be compared before deciding which market to pursue. It is important to consider the economics of each market. Different

resources will be required. Labor, liability, and location are critical for PYO. Packaging costs can also be a significant factor. Careful attention to production costs and marketing can yield significant differences in the bottom line.

Blueberries have the potential to complement other enterprises grown on the farm, particularly for direct marketing. Farmers should consider the costs and benefits of adopting blueberries to their full operation. Careful planning, particularly regarding marketing, will reap rewards for the producer in the end.

Additional Resources

There are many resources available to producers for help in growing and marketing new crops. Listed below are a few of the resources appropriate for blueberry growers in Kentucky. Many of the Web sites require Adobe Acrobat Reader for viewing.

Highbush Blueberries

University of KY New Crop Opportunities Center Crop Profile

An overview to help evaluate blueberry production potential

<http://www.uky.edu/Ag/NewCrops/introsheets/blueberryintro.pdf>

Growing Highbush Blueberries in Kentucky

University of Kentucky Extension Publication HO-60 outlines Extension recommendations for highbush blueberry production in Kentucky

<http://www.ca.uky.edu/agc/pubs/ho/ho60/ho60.htm>

University of Kentucky New Crop Opportunities Center

Several University of Kentucky faculty and staff have expertise related to producing blueberries. Contact the New Crop Opportunities Center (newcrops@uky.edu) or call the Center at 859-257-1477 for a person with expertise in your region.

Blueberry Marketing Fact Sheet

University of Kentucky HortBiz Web Site Publication

Offers a snapshot of annual and historical production and marketing trends in the national and international blueberry industries

http://www.uky.edu/Ag/HortBiz/pubs/mktfs_blueberry.pdf

Kentucky Blueberry Cost and Return Summary

Current estimates for blueberry profitability by the University of Kentucky Department of Agricultural Economics

<http://www.uky.edu/Ag/NewCrops/decision.html>

University of Kentucky Direct Marketing Publications

“Promotion and Advertising for Kentucky’s Direct Markets”

<http://www.ca.uky.edu/agc/pubs/id/id106/id106.htm>

“Understanding Produce Marketing for Kentucky’s Direct Marketers”

<http://www.ca.uky.edu/agc/pubs/id/id107/id107.htm>

U.S. Highbush Blueberry Council

Includes recipes, promotional ideas, and market information

<http://www.ushbc.org/index.html>

Kentucky Blueberry Growers Association

This is a network of Kentucky blueberry growers that publishes a newsletter about activities and production. For more information, contact:

Larry Martin
8080 Subtle Rd.
Edmonton, KY 42129
(270) 432-5836

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<http://www.uky.edu/Ag/AgEcon>

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin.

Appendix: 2003 Berry Packaging Evaluation

Material	Observed Advantages	Observed Disadvantages	Market Channel Recommendations
Fiber pulp (green)	Picking ease	Fruit can spill	On-farm
	Absorbs bramble juice	Disintegrate in high moisture	Farmers' market
	Consumer familiarity		U-Pick
Paperboard (white/brown)	Consumers find attractive	Fruit can spill	On-farm stand
	Slightly more capacity	Availability/cost Fruit settles in cooler	Farmers' market
Plastic clamshell (#1 PETE Plastic)	Lids/Stackable	Customers associate with grocery market	Wholesale
	Moisture resistant	Cost/availability Brambles require absorbent pad	Direct markets (without lids)
Wooden Hallock Band (1/2-pint)	Consumers find attractive Expense comparable to paper/pulp products	Small capacity	Farmers' market, for higher priced berries
1/8-peck (3-pt) Wooden Basket w/handle	Consumers loved it	Requires recipe attachment—consumers unsure how to use 3 pts of berries	On-farm market
	Handle for carrying		Farmers' market
2/2.5-lb Clamshell	Lid and stackable	New size for buyers	Restaurant, Auction
5-lb and 10-lb Corrugated (Blueberry)	Cheaper packaging		Bulk wholesale (Restaurant, Auction)
	Easier Packing		