Finding Revenue in your Blueberry Business

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The Dyson School of Applied Economics and Management at Cornell University has a long history of compiling business summaries for different agricultural sectors in New York with the assistance of Cornell Cooperative Extension. Notable examples of these summaries are the Dairy Farm Business Summary and the Fruit Farm Business Summary (FFBS). Gerald White, Dyson School professor emeritus says that the FFBS "identifies the business and financial information they (growers) need and provides a framework for use in identifying and evaluating the strengths and weaknesses of the farm business." Experience with tree fruit growers using FFBS shows they quickly identify practices that are more costly than state benchmarks and address why their individual costs are higher. In 2013, Cornell launched a new effort to analyze the financial condition of berry farms in the state through a Berry Farm Business Summary. Led by faculty and staff from the Department of Horticulture, and the Dyson School of Applied Economics and Management, a team of extension educators worked with eight berry farmers across the state to complete farm business summaries. Each farm provided descriptive information on their farm, and income, expense, labor, and capital records.

Eight farms participated in 2013, the first year of the project. Six of the farms had berries as a primary enterprise on the farm, and are smaller farms. Two of the farms primarily grow tree fruit, with berries as an important secondary enterprise. These two farms were larger, making it difficult to draw general conclusions between them and the six smaller farms. One area for further study and possible benchmarking did emerge in the difference between average yields on the farms. For the six farms, average yield of blueberries was 1,985 pounds per acre. When the other two farms are added, the yield increased by 2,312 pounds/acres to 4,297. A more detailed analysis of production practices and management strategies at the enterprise level could show opportunities for higher production rates of berries in New York.

Table 1: Size of Business and Yields

Size of Business	*8 Farms*	*6 Farms*
Bearing Fruit acres	45.60	5.93
Total berry production (lbs.)	41,927.13	15,266.17
Worker equivalent	8.02	2.12

Rates of Production (lbs./acre)		
Blueberries, pounds per bearing acre	4,297.21	1,985.05

In addition to the business summary, an enterprise budget was developed based on input costs and labor costs that were broken down by tasks in a typical high bush blueberry system. Members of the New York State Berry Growers Association then verified the assumptions in the enterprise budgets. Each budget includes cost of production expenses for the pre-plant year, establishment year, and an early production year. Not surprisingly, labor was the most costly component of production expenses, as illustrated by the production year where labor for wholesale or retail berries was 80% of the total expenses. Using information from the business summary, this is also an area that showed differences between the 2 relatively larger farms and the other six farms in the completed analysis. On the 6 farms the average worker could cover 3.44 acres, and when the two other farms are added the average worker handled 4.48 acres. Labor certainly requires careful management for efficiency and maximum profit potential.

Using data from the 2012 NYS Berry Pricing Survey, and the expenses from the enterprise budget, a breakeven analysis was developed based on different yield and price assumptions. Establishment costs were pro-rated over 10 years for the planting. Also, operator labor was included as an expense. In this analysis it showed that farms that are producing 1,876 lbs./acre of blueberries would have to charge $9.00/pound just to cover their costs. On the other hand a farm growing 4,221 lbs./acre would only to need charge $4.00/lbs.

Table 2: Returns to Risk and Management for Wholesale Blueberries, NY 2014

	Yield (lbs./acre)			
Price ($/lb.)	**2,000**	**3,000**	**4,000**	**5,000**
$2.00	$4,000.00	$6,000.00	$8,000.00	$10,000.00
$3.00	$6,000.00	$9,000.00	$12,000.00	$15,000.00
$4.00	$8,000.00	$12,000.00	$16,000.00	**$20,000.00**
$5.00	$10,000.00	$15,000.00	**$20,000.00**	$25,000.00
$6.00	$12,000.00	**$18,000.00**	$24,000.00	$30,000.00
$7.00	$14,000.00	$21,000.00	$28,000.00	$35,000.00
$8.00	$16,000.00	$24,000.00	$32,000.00	$40,000.00
$9.00	**$18,000.00**	$27,000.00	$36,000.00	$45,000.00
Breakeven price	$8.44	$5.63	$4.22	$3.38

For a grower to find additional revenue from their blueberry business, they need to understand their cost of production, pricing, and breakeven yields and prices. Additional production challenges from a changing climate and increasing pest pressure from invasive species can result in higher costs making it even harder to find adequate revenue from blueberries. Growers that have more complete financial information about their business and overall berry economics should be able to better plan to meet their financial goals.