STRATEGIC MARKETING PLANS FOR FLORIDA SPECIALTY CROPS: A CASE STUDY APPROACH

Bу

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A THESIS PRESENTED TO THE GRADUATE SCHOOL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE

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To my biggest fans: Mom, Dad, April, and Mark.

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Abstract of Thesis Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Master of Science

STRATEGIC MARKETING PLANS FOR FLORIDA SPECIALTY CROPS: A CASE STUDY APPROACH

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Several specialty crops in Florida have benefitted greatly from product-specific marketing, including Florida citrus and Plant City strawberries. This thesis explores the role that product-specific marketing can play in the promotion of Florida blueberries and peaches as quality Florida-grown products. This project is especially timely as Florida citrus growers look to blueberries and peaches as alternative crops in areas affected by citrus greening. Prior to this research, very limited marketing strategies existed for the Florida peach and blueberry industries. This project found that most consumers cannot correctly identify the Florida peach and blueberry seasons and many consumers are unclear about the health benefits garnered by consuming both fruits. In the case of peaches, many consumers were unaware that peaches are grown in Florida.

Using a case study approach, this thesis serves a few purposes: to develop strategic marketing plans for the Florida peach and blueberry industries, to provide detailed situational analyses of the Florida peach and blueberry industries' current markets, and to provide a detailed method for developing a product-specific marketing plan that other agricultural industries can follow when seeking to market agricultural

products. All of the objectives were informed through nationwide consumer and producer surveys, as well as through in-depth interviews with peach and blueberry marketing groups. As a result, marketing plans were developed with attainable industrywide marketing tactics, as well as tactics specifically for individual producers and marketing groups.

CHAPTER 1 INTRODUCTION

Research Background

Aside from sunny weather and pristine beaches, Florida is also an important part of the world agriculture supply. Florida is home to 9.5 million acres of agricultural land that provide \$1.55 billion in value from major specialty crops (Pearney 2014). These specialty crops include tomatoes, strawberries, bell peppers, potatoes, blueberries, and sweet corn, among several other fruits and vegetables. Florida offerings are enjoyed throughout the United States as well as internationally. In 2014, Florida was ranked eighth in the United States for agricultural exports, with edible fruits totaling more than \$399.3 million in export value (Pearney 2014).

Florida agriculture has historically been synonymous with citrus production, and the citrus industry of Florida led the way for many other agricultural commodities to stake claim in other state economies. The Florida Citrus Commission and the Florida Department of Citrus, acting together, formed the first industry association dedicated to marketing a single agricultural commodity in the nation (Hussey 2010). Hussey (2010) explains the importance of cooperative marketing for the Florida citrus industry in uniting citrus producers to leverage for higher prices in local and distant markets. Eventually, the cooperative nature of the citrus industry evolved to include measures that ensured citrus quality standards, secured effective lobbying, and developed national citrus marketing campaigns (Hussey 2010). The success of the marketing of Florida citrus led several other states to begin marketing single agricultural commodities, such as "Washington's Apple Commission and Wisconsin's Milk and Marketing Board" (Hussey

2010). However, the spread of huanglongbing, or "citrus greening", has led several Florida citrus growers to consider other uses of their agricultural land (Satran 2013).

Many Florida citrus growers have looked to blueberries and peaches as alternative crops when citrus groves fall to greening (Evans and Ballen 2014; Moffis et al. 2016). Low-chill varieties of both peaches (Olmstead et al. 2016) and blueberries (Williamson, Olmstead, and Lyrene 2015) have been developed by the University of Florida for use by Florida growers in the state's unique climate. These new blueberry and peach cultivars afford Florida growers with a unique marketing window in which no other production region can offer either fruit from March through May. This time period provides Florida growers with historically high prices until production from other states enters the national market (Williamson et al. 2014). The Florida peach and blueberry industries exhibit unique marketing challenges for both growers and marketing groups, but several opportunities also exist for Florida peaches and blueberries.

The success of the marketing of agricultural products spans across years and state borders. Florida citrus, Georgia peaches, and California avocados are just a few examples of successful marketing of agricultural products resulting in consumers linking a state with a specific produce item. The apparent threats to citrus may provide Florida an opportunity to become synonymous with other agricultural offerings, like peaches or blueberries. This thesis explores the current market situations of the Florida peach and blueberry industries and seeks to offer recommendations based on market research. This project is made possible through two specialty crop block grants provided by the Florida Department of Agriculture and Consumer Services (FDACS).

Research Problem

Florida's peach and blueberry market windows provide ample opportunities to growers, as well as several challenges. Establishing a blueberry enterprise can cost as much as \$25,000 per acre and the production cost in the first year can be as high as \$4,000 per acre (Williamson, Olmstead, and Lyrene 2015). Peaches must be harvested several times throughout the season, as they do not mature at uniform rates (Olmstead et al. 2013), increasing the production cost. High establishment and production costs coupled with a short marketing window make the marketing activities for both peaches and blueberries extremely important in order for all market players to recoup costs.

At the time of this project, no marketing program existed for either the blueberry industry or peach industry. Fresh from Florida (FFF), a program implemented by FDACS to assist Florida growers in marketing their crops, and individual marketing groups provided most of the marketing for Florida peaches and blueberries, but neither group had a uniform plan for advancing the industries.

The University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Public Issues Education (PIE) Center was awarded two 2015 Specialty Crop Block Grants through FDACS in order to increase the marketability of several Florida specialty crops. The research made possible through this grant served to gather consumer, producer, and marketer insights in order to develop a marketing plan for the Florida blueberry and peach industries. The main research question in this study was to determine the factors influencing the Florida peach and blueberry industries in order to recommend effective marketing tactics.

Objectives

Overall Objectives

The following objectives guided this research project.

- Develop strategic marketing plans for the Florida peach and blueberry industries based on insights from consumers, growers, and marketers.
- Provide a detailed method for developing an agricultural marketing plan that other industries may follow when seeking to market agricultural products.

Specific Objectives

In order to achieve the overall objectives of the project, a few specific objectives

were identified as follows.

- Provide detailed situational analyses of the Florida peach and blueberry industries' current markets. Many of the factors included in the situational analyses directly affect the demand for Florida peaches and blueberries and provide other industries a method for determining these factors.
- Conduct an analysis of strengths, weaknesses, opportunities, and threats (SWOT) for the both the Florida peach and blueberry industries. This analysis serves to identify the competitive advantages and disadvantages facing the Florida peach and blueberry industries following a competitive analysis.
- Provide willingness-to-pay amounts for the Florida peach industry using the Van Westendorp Price Sensitivity Meter to investigate consumer willingness to pay for Florida peaches in comparison to peaches produced in other states.
- Develop marketing tactics for the Florida peach and blueberry industries to guide industry leaders and associations in addressing the marketing challenges identified in the situational analysis.
- Develop marketing tactics for individual blueberry and peach grower and marketers to provide additional marketing resources that are feasible for all sizes of operations.

CHAPTER 2 LITERATURE REVIEW

Uses of Case Studies and Qualitative Research

Qualitative research, including the case study approach, has been studied for its applicability and appropriateness in drawing scientific conclusions. A definition by Eisenhardt (1989, p. 534) explains that "case studies typically combine data collection methods, such as archives, interviews, questionnaires, and observations. The evidence may be qualitative (e.g. words) or quantitative (e.g. numbers), or both." Eisenhardt (1989) explains a few examples of how case studies are used as solutions to several organizational issues. From the management of new ventures to forming new business and marketing strategies to planning and preparing for strategic change, case studies and qualitative research are powerful tools for social science research (Eisenhardt 1989).

Robert Yin (2016) praises qualitative research for the ability to overcome obstacles faced by researchers when implementing other research methods. Qualitative research allows for more comprehensive studies without the constraints of sample size and response rates inherent with survey research or the need to meet certain conditions in experimental research (Yin 2016). Thomas Bonoma (1985) argues that while case study and qualitative research have high contextual relevance, they also exhibit the lowest data integrity out of all possible research methods. However, a low level of data integrity in qualitative research can often be lessened through the use of triangulation (Yin 2016; Bonoma 1985).

Triangulation, while often expensive and difficult to achieve, may improve the validity of qualitative data and ability to generalize the data (Bonoma 1985). The

practice of triangulation involves seeking three avenues to validating research findings and can be achieved through evaluating the collected data and corroborating findings between investigators, among other ways (Yin 2016). The main goal of triangulation, as described by Yin (2016), is to find "converging lines of inquiry" about all actions and assumptions used in the research project.

Yin (2016) assures that there are other ways to ensure the credibility of qualitative research, including using validity measures and acting methodically in research procedures. The perceived shortcomings of case study and qualitative research withstanding, Yin (2016) asserts that qualitative research is extremely worthwhile for the social sciences. Rich information is available from respondents that are engrossed daily in the subject under study. Qualitative research also allows for several research methods to be used to explain real-world phenomena, without the constraints of other traditional research methods (Yin 2016).

Effects of Imperfect Information on Consumer Demand

Previous research indicates that demand for food products varies with the amount of consumer information on quality and price. According to Archibald, Haulman, and Moody, Jr. (1983), a consumer's single goal in searching for a product is to find a "good buy", which is defined as combining high quality with a low price. Locating a good buy requires consumers to seek out information about the product, either on their own or from friends and other trusted sources (Nelson 2016). According to Beales et al. (1981), there are two main information sources available to consumers: internal and external sources. The internal information sources are those that the consumer remembers as a result of previous experiences and personal research. External sources of information include the consumer trying the product or seeking information

from a seller (Beales et al. 1981). An empirical study on the role of sampling food products showed that the "expected utility of a sample suggested by a friend will be greater than the expected utility of a random sample" (Nelson 2016, p. 321). The same study showed that complete information is seldom gathered from friends, considered here as an external information source, as seeking advice from a friend in every purchase is cumbersome for both parties (Nelson 2016). Therefore, individual consumers must make some purchase decisions based on other indicators, such as price and quality, and any limitations on the amount and quality of information received by consumers can alter the entire structure of the consumer goods market (Nelson 2016).

More specifically to information about price and quality, Nelson (2016) writes:

Information about quality differs from information about price because the former is usually more expensive to buy than the latter. Indeed, this is one reason we expect the variance in utility of quality facing a consumer to be greater than the variance in the utility of price. (p.311)

How, then, should a consumer be expected to make purchase decisions based on quality if the ability to gather information about price is more feasible than gathering information about quality? Nelson (2016) asserts that price is simply a less expensive option for gathering information because it is a readily-available source. However, Archibald, Haulman, and Moody, Jr. (1983) assert that the introduction of quality ratings on consumer products may be a means to disseminate information about quality to more people. While this study mainly focused on consumer ratings from magazine and internet surveys, perhaps the conclusions can be related further to industry leaders and food bloggers publicly voicing praise for one agricultural product over another based on quality characteristics. Archibald, Haulman, and Moody, Jr. (1983) and Steenkamp (1988) assert that the extended dissemination of quality information via consumer education through advertisements may decrease the problem of imperfect information in the marketplace. In fact, as more consumers become better informed on quality variations, the effects of uninformed consumers purchasing solely based on low prices might be lessened, with the result of the market accurately reflecting differences in quality (Steenkamp 1988). As the market more accurately reflects quality disparities, consumers will demand more good buys, seeking low prices combined with high quality, instead of bad buys (Archibald, Haulman, and Moody, Jr. 1983). The increased demand for good buys might actually eliminate the delineation of good and bad buys, lending more correlation between price and quality overall (Archibald, Haulman, and Moody, Jr. 1983).

Need for a Strategic Marketing Plan

Wysocki et al. (2015) defines the marketing plan as a written document that "requires communication across different functional areas of the firm, such as operations, human resources, sales, shipping, and administration". As a practice, strategic marketing allows for the firm to set goals and objectives, to develop and manage strategies of the business, set priorities for changes, and to improve performance (Wysocki et al. 2015). In order to accomplish these tasks, a marketing plan must be developed to "ensure a long-term customer base" by uncovering consumer wants and needs and offering value to customers beyond what competitors can offer (Evans and Ballen 2015). Evans and Ballen (2015) assert that this value is created through establishing the best combination of product, price, place, and promotion for consumers. Finding the most efficient combination of the marketing mix involves market

research to identify the current product, customers, and competition to be addressed in the marketing plan (Evans and Ballen 2015).

Market research is broken up in several sections. An external analysis involves a customer analysis, a competitive analysis, and an industry analysis, all of which are used to identify the greatest strengths and weaknesses facing the firm (Wysocki et al. 2015). The customer analysis includes identifying potential market segments and customer characteristics for the product or service, as well as identifying any unmet needs of these segments (Wysocki et al. 2015). For the competitor analysis, Wysocki et al. (2015) suggest a strategy that includes identifying the competitors' strengths and weaknesses and then discerning what the firm can learn from competitors. The industry analysis is used to better understand the existing dynamics of the market by identifying market trends, success factors, competitive forces, and change factors that affect how the firm conducts business (Wysocki et al. 2015). All of this research considered together assists the development of the SWOT analysis section of the written marketing plan.

In discussing the need for a marketing plan, Wysocki et al. (2015) explain that the SWOT analysis is the process of identifying a firm's strengths, weaknesses, opportunities, and threats. Strengths and weakness are considered internal to the firm, while opportunities and threats are external to the firm. Wysocki et al. (2015) further explain that the main goal in conducting a SWOT analysis is to identify the firm's competitive advantages by identifying the greatest strengths and matching them with the greatest available opportunities. Competitive advantages should be the first identified after conducting the SWOT analysis in order to inform the tactics section of

the marketing plan. Then the competitive disadvantages, which exist when the firm's most distinct weaknesses are matched with the greatest threats facing the firm, can be addressed (Wysocki et al. 2015).

CHAPTER 3 METHODS

Data Collection

The methods used in this research project were chosen based on several factors. To satisfy the requirements for the FDACS Specialty Crop Black Grant, online, nationwide surveys were conducted to ascertain consumer preferences for both the peach and blueberry marketing plans. Surveys also informed the development of the grower section of the blueberry marketing plan through an online survey of Florida growers. The grower contacts for the survey were provided by the Florida Blueberry Growers Association email list. In-depth interviews were used to inform the sections of the marketing plan dedicated to understanding the current marketing practices used by large produce marketers in Florida to specifically market Florida blueberries and peaches. Peach growers were also targeted by the in-depth interviews due to the small number of growers in Florida and the availability of contact information. Contacts for the blueberry marketer interviews were identified by searching through industry publications for advertisements, through online searches, and from recommendations of other marketers. Contacts for the peach grower and marketer interviews were identified from a list of Florida Fruit and Vegetable Association peach committee members, as well as from conversations with peach industry leaders.

Even as different methods were used to collect data to inform the peach and blueberry marketing plans, specific stages of the research process were followed. Singleton, Jr. and Straits (2010) offer the following order to follow for each stage of the social science research process: formulation of the research question, preparation of the research design, measurement, sampling, data collection, data processing, and

data analysis and interpretation. For the purposes of this research project, the research problem was identified, for both Florida peaches and blueberries respectively, as how to increase the marketability of the two fruits. Literature reviews often provide a basis to narrow the research question to more specific objectives and offer insights into how other researchers have addressed similar questions (Singleton, Jr. and Straits 2010, p. 109). For this reason, the first step in this research study was to identify the current marketing practices for Florida peach and blueberry industries through preliminary internet searches and conversations with industry leaders.

The remaining research steps were carried out based on the segment of the marketing plan that was in progress. Singleton, Jr. and Straits (2010, p. 110) argue that the best strategy for deciding on the research design is to use a combination of several designs, such as surveys combined with interviewing. The decision to use a survey for certain groups and in-depth interviews with other groups was made based on recommendations from several University of Florida research specialists and industry professionals. The large number of Florida blueberry growers made for an effective survey of the industry. The young peach industry had much fewer growers and even more sparse availability of contact information, rendering surveys ineffective. In-depth interviews were chosen for peach growers, peach marketers, and blueberry marketers in order to gain richer information that would be available with a survey.

Data collection and processing for the surveys was conducted by the UF/IFAS Public Issues Education (PIE) Center. The data analysis and interpretation was conducted using data sets prepared by the PIE Center, as well as with reports generated by the PIE Center based on the data. Data collection and processing for the

interviews was conducted through transcription of recorded interviews. Data analysis of the interviews was conducted using the transcriptions to inform sections of the marketing plan.

Use of In-Depth Interviews

Interviews played a large role in the development of the peach and blueberry marketing plans for this research project. Singleton, Jr. and Straits (2010) explain that while standardization in interviewing is an important way to ensure validity of results, it may also lead to poor answers from the respondent and take away the ability for the interviewer to clarify questions. In the case studies for the blueberry and peach marketing plans, one person conducted all interviews from the respective interview guides. The interviews followed the structure of the interview guide, while allowing for tangents when necessary. This interview style, which allowed for follow-up questions and impromptu topics, resulted in an even greater depth of information to be garnered from the respondent. The use of one researcher was helpful in assuring that each interview was conducted in a similar manner to the others.

Interview guides were developed for both the peach and blueberry marketing plan projects. The interview guides were reviewed by several University of Florida faculty and by a produce industry professional before submission to the University of Florida Internal Review Board for final approval. The interview guides spanned a variety of topics including perceptions of the past and future states of the industry, how marketing is currently conducted by marketers and growers, and what strengths and weaknesses, and opportunities and threats exist for the industries. Each interview was recorded and then transcribed for analysis. The Blueberry Marketer Interview Guide can

be found in Appendix A and the Peach Marketer Interview Guide can be found in Appendix B.

Van Westendorp Price Sensitivity Model

The Van Westendorp Price Sensitivity model was used specifically in the Florida peach marketing plan to determine consumer willingness to pay for Florida peaches in comparison to peaches grown in other states. The hypothesis guiding this analysis assumed that consumers are willing to pay a premium price for peaches grown in Florida because of Florida peach quality advantages and the limited availability of peaches during the Florida peach marketing window. In the peach consumer survey, respondents were asked to write in the dollar amount at which they would consider peaches to be too expensive that they would not consider buying them (too expensive); so inexpensive that they would doubt the quality and would not consider buying them (too inexpensive); starting to get expensive where the purchase is not out of the question, but they would have to give some thought to buying them (expensive) or a bargain that is a great buy for the money (inexpensive). Respondents were then asked to respond to the same questions specifically for peaches grown in Florida.

The Van Westendorp Price Sensitivity Model is reliant on three main assumptions: a reasonable price at each quality level of the product exists for each individual consumer; consumers consider both price and value when making purchase decisions and are willing to pay more for a higher quality product (Weiner 2001); and upper and lower price bounds exist for consumer willingness to pay (Lipovetsky 2006). The result of this model is a range of prices that consumers are willing to pay for any given product (Lipovetsky 2006) that may guide a firm's pricing strategy.

According to Lipovetsky (2006), two preferred methods prevail for completing an analysis for the Van Westendorp Price Sensitivity Model. In the first, pricing options are provided based on the actual prices being considered for the product. In the second method, respondents are able to reply to the four price questions using personal price preferences. The latter option allows for more prices to be considered in the analysis and removes some of the bias associated with providing respondents with a set price range (Lipovetsky 2006). The second option was chosen for the willingness to pay analysis for Florida peaches.

Once all price preference data was received from respondents, categories called 'too expensive', 'too inexpensive', 'expensive', and 'inexpensive' were created, with means and standard deviations found for each group. The data was cleaned of any extraneous responses, including prices that were too high to be considered reliable. For some responses, it was inferred that the dollar amounts given were simply missing a decimal (e.g. \$98 assumed to be \$0.98) and were corrected.

The next step in the constructing the Van Westendorp model is to find the cumulative frequencies for each of the price categories (Lipovetsky 2006). For the purposes of this analysis, each price point that respondents gave was considered as an individual observation and the cumulative frequencies populated around these observations. For example, at \$0.00, 100% of respondents considered the peach to be both too inexpensive and inexpensive. At \$100, 100% of respondents consider the peach to be too expensive or expensive. The respondent did not have to explicitly state that \$100 was too expensive, but each respondent offered a price that was too expensive for their buying preference and any point over that price was assumed to also

be too expensive. A graph was constructed for the analysis using the cumulative frequencies for each pricing category.

A few useful points can be determined from the Van Westendorp graphs. The indifference price point (IDP) is where equal numbers of respondents believe that the product is expensive and inexpensive (Lipovetsky 2006). Any price greater than the IDP results in a loss of profits and customers because, beyond the IPP, the number who think price is expensive is greater than those who think it is inexpensive (Weiner 2001). The point of marginal cheapness (PMC) exists at the price where equal numbers of respondents believe that the price is too inexpensive and expensive (Lipovetsky 2006). The PMC represents the lower bound of acceptable prices from all respondents (Weiner 2001). Conversely, the point of marginal expensiveness (PME) exists at the price where equal numbers of respondents believe the product to be inexpensive and too expensive (Lipovetsky 2006). The PME represents the upper bound of price for all respondents (Weiner 2001). The optimal price point (OPP) exists where equal numbers of respondents indicate that the price is too inexpensive and too expensive (Lipovetsky 2006) and is the price at which consumers would be most willing to buy the product (Weiner 2001). The Van Westendorp Price Sensitivity Model provides all of these points in order to aid decision makers in setting prices based on consumer preferences.

Limitations exist with the information obtained in the willingness to pay estimates through the Van Westendorp method. The method involves a contingent valuation, where a hypothetical market for peaches is presented to respondents. The respondents' answers to the willingness to pay questions are purely based on a hypothetical buying situation and respondents are aware that their answers to the price questions do not

require them to pay real money for the peaches at that moment. In literature surrounding contingent valuation, the threat of hypothetical bias is found to be credible in skewing the findings of a willingness to pay study. Often the acceptable price that is reported by consumers in a hypothetical situation far exceeds, or at least significantly differs from, the price that consumers are actually willing to pay in a true marketplace (Blumenschein et al. 1998). The difference between these values is referred to as hypothetical bias (Murphy et al. 2004). The differences in reported and actual payment values may originate from survey respondents' concerns about how their answers will affect the product's price in the real world or it may be that a survey setting does not allow for respondents to shop around for substitutes or to learn more about the product like they would in a real marketplace (Bishop and Heberlein 1979).

In the Florida peach case study, the main finding is not as concerned with assessing the difference in actual value for consumers in the real world and reported value in the hypothetical survey setting. The main conclusion drawn from the willingness to pay study for Florida peaches is that the consumers' reported values for peaches grown in Florida and peaches grown in the United States do not differ from each other. Regardless of the hypothetical bias that may occur in the study, the point still remains that consumers are not willing to pay a higher price for Florida peaches over peaches grown in other areas.

All of the unique Van Westendorp points and the conclusions from this analysis for the Florida peach industry are discussed in chapter five.

CHAPTER 4 BLUEBERRY CASE STUDY

As blueberry production in the United States continues to grow, so does the Florida blueberry industry. In the United States, total blueberry production increased by 5 percent from 2013 to 2014, with the total production reaching 563.2 million pounds in 2014 (USDA 2015). With a value greater than \$47 million, the Florida blueberry industry has taken its place as the 7th ranked blueberry producing state in the nation (USDA 2015). In 2015, Florida produced 25 million pounds of blueberries, an industry high (Calfee 2015). With a short production window prior to other domestic blueberries entering the market, the Florida blueberry industry is faced with unique challenges, as well as unique advantages, compared to other production areas. This case study seeks to identify opportunities for the Florida blueberry industry to capitalize on these advantages by making consumers more aware of the Florida blueberry growing season and production locations throughout the state.

For the purposes of the marketing plan in this case study, the term "marketer" refers to the marketing groups that buy and sell blueberries for contracted growers. These entities may also engage in promotional campaigns for the both the growers and the whole marketing group. Campaigns include social media outreach, media promotions, and all other communications tasks. The term "direct marketing" refers to individual growers selling their own blueberries through farmers markets, Community Supported Agriculture programs, U-pick operations, or direct sales to retailers or wholesalers.

Situational Analysis

The Market

Florida's market window of late-March through mid-May has historically been viewed as available primarily to Florida growers, where they have experienced historically high prices. These high prices averaged \$5 per pound (2000 to 2008) for berries shipped before May 20 (Williamson, Olmstead, and Lyrene 2015). Since reaching a high point in prices for the Florida season in 2012, average prices in retail stores have begun to decline. Figure 4-1 shows the decline in average retail price in the United States for non-organic blueberries, using six ounce cups as the pricing benchmark, due to the availability of data for this package size.

As Figure 4-1 illustrates, there is an apparent decline in the average prices that U.S. consumers have been paying for berries during the Florida window, which is denoted by the orange boxes that are outlined in blue. The red trend line represents the average per-pound retail price of all blueberries from 2012 to 2014 at \$2.90, as calculated from the USDA Agricultural Marketing Service commodity reports. The trend shown in Figure 4-1 illustrates that the average retail price for Florida blueberries is getting closer to the national average each year. Where there used to be much more dramatic spikes in price during the Florida production window, prices have begun to smooth out over time. The leveling of prices may be due to increasing production in Florida, other states, and other countries. It may also be due to the everyday low pricing implemented by some retailers as a tool to reduce the volatility in consumer prices. Retailers would rather offer prices that are low and predictable to consumers instead of requiring consumers to anticipate rises and falls in prices.

Florida's utilized production (crops that were marketed both domestically and internationally (Vorotnikova, VanSickle, and Borisova 2012)) has increased steadily through the last several years. Figure 4-2 shows that Florida's utilized production of fresh blueberries has increased from 17 million pounds in 2012 to 19 million pounds in 2013 and 2014 (USDA 2015b). More recently, the state's utilized production hit 25 million pounds (Calfee 2015). An increase in production is expected to cause a decline in prices for the entire market. The previous finding that the average price of blueberries during Florida's season is decreasing, and getting closer to the national average price, may be partially explained by this increase in production. However, more factors may be at play concerning competitors, discussed further in the competitor analysis.

The Growers

Florida blueberry growers are diverse in their acreage, farm sizes, and their individual practices. A study conducted by the University of Florida in the late summer months of 2015 surveyed a sample of 52 growers in Florida, with acreage ranging from one to five acres (23.3%), six to 15 acres (30%), and more than 16 acres (46.6%). For ease of this analysis based on the reported acreages, the findings are split into large, medium, and small acreage groups, where 1-5 acres was considered "small", 6 to 15 acres was considered "medium", and more than 16 acres was considered "large." According to the PIE Center grower survey, one-third of growers in the state have been in business for less than five years and the remaining two-thirds have been producing blueberries for more than six years. The variety of years of production among growers may provide insight to the differing practices seen in the industry. These practices include growers who use a marketer exclusively, do their own direct marketing exclusively, or use a combination of a marketer and direct marketing.

Growers that use a marketer exclusively

Seventeen surveyed growers chose to only utilize a marketer, without participating in any of their own direct marketing efforts. Most of these growers were from large farms, comprising almost 60% of this marketer-only group. This group strongly indicated that they chose their current marketer on the recommendation from another grower or friend. They also indicated that their main reason for not choosing to use direct marketing along with their use of a marketer is lack of time, followed by the difficulty of gaining access to and identifying buyers.

Overall use of a marketer, regardless of direct marketing

If using a marketer (an individual that represents the grower in sales and in marketing efforts), most growers agreed that the marketer gives them more access to the market and that they are loyal to their current marketer. This included the 17 growers that only used a marketer, as well as the 30 growers that also engaged in direct marketing, which is discussed further in a later section. The surveyed growers indicated overall satisfaction in their communication with their marketers by email and telephone, with face-to-face communication receiving the highest satisfaction rating. However, information gathered from in-person interviews with growers suggests opportunities to improve communication between growers and their marketers.

Direct marketing use

Sixty-six percent of the growers were already engaged in direct marketing or were considering using direct marketing, regardless of their involvement with a marketer. For clarity, the growers were told that direct marketing included marketing outlets such as U-pick, roadside stand, retailers, wholesalers, and food service distributors (e.g., Sysco, US Foodservice, etc.). It was further clarified that selling to a

marketer/broker was not direct marketing. One difference in the three farm sizes was their perception of the difficulty related to using direct marketing and the success of certain marketing channels, which are discussed in the following sections.

Growers that use direct marketing exclusively

When looking at those who only use direct marketing or are considering using only direct marketing, in lieu of a marketer, only four growers of those surveyed had chosen to only use direct marketing. Of these, three were small farms and one was a medium-sized farm. These four growers may have been using only direct marketing due to small production volumes possibly not meeting the volume requirements that a marketer would require. They all also indicated that they enjoy selling their own blueberries, instead of utilizing a marketer to sell them. All four growers used U-pick and one grower also used direct to individual sales for their direct marketing, and all of them believed they had access to sufficient resources to learn about promoting their berries.

The three small growers and the medium-sized grower, using only direct marketing, indicated that word of mouth, a business website, newspaper advertisements, and business Facebook pages were successful communication channels to promote their blueberries. The small growers also indicated billboards as successful communication channels. Television advertisements scored low in terms of success for the four growers using only direct marketing.

Growers using direct marketing and a marketer

Thirty growers indicated that they use or are considering using both a marketer and direct marketing. Almost half of these growers operated large farms, followed by 30% comprised of medium sized farms, and just over 20% comprised of small farms. Small acreage growers that used or were currently considering using both a marketer

and direct marketing strategies considered it much more difficult to promote their Upicks than the medium and large acreage growers. Growers of all acreage sizes in this group did not report that promoting at farmers markets was either easy or difficult. Growers of all farm sizes indicated word of mouth was a very successful communication channel used to promote their blueberries through direct marketing channels, while magazine and television advertisements were not thought of as successful. Newspaper advertisements were believed to be moderately successful by small and medium sized operations. Large farms were indicated that their own business website and business Facebook pages were successful in promoting their blueberries.

Growers who used direct marketing and a marketer mainly used U-pick, direct sale to retailers, direct sale to wholesalers, and farmers markets as their direct marketing tools. Most of the direct sales to retailers and wholesalers were made by the large growers. All sizes of growers agreed that running a U-pick was easy in terms of access, compliance to rules and regulations, transportation, relationship building with buyers, and promotion of blueberries, but selling directly to restaurants was indicated as more difficult. The tactic of partnering with restaurants will be discussed in greater detail in the marketing plan section.

Growers learned about promoting blueberries from many different resources. Thirty-four percent relied on past experiences and the advice of family and friends. Twenty-seven percent of growers had used resources provided by the Florida Blueberry Growers Association (FBGA). This is an important finding because it reinforces the role that FBGA plays in disseminating a unified message about the industry for growers to follow. Growers were less likely to seek out publications on extension websites to learn

about promoting their berries. Thirteen percent of growers that reported never using any resources to learn about promoting blueberries. The development of new marketing resources or new ways of communicating may encourage more growers to begin promoting their berries for the first time.

When asked about the success of their promotion, many growers report that word of mouth and a business Facebook page have been very successful, while their own business websites have been moderately to very successful. This includes the four growers that market their berries exclusively through direct marketing and also those who use a marketer along with their own direct marketing efforts. Providing these growers who are already marketing-minded with more tools to promote their businesses will not only help them, but will also benefit the entire industry by making the Florida blueberry season even more recognizable. Many growers stated that they do not use several forms of promotion because they are too expensive (billboards, radio advertising) or they do not know how to use them (Facebook). This is where an industry provided campaign or toolkit would be useful, perhaps through Fresh from Florida and/or FBGA.

The Retailers

A study conducted by the PIE Center tracked the advertisements of blueberries during the time Florida blueberries were available in retail stores in 2015 (Qu and Rumble 2016). This tracking was conducted for 13 eastern states including Georgia, Florida, South Carolina, North Carolina, Pennsylvania, New York, Massachusetts, Connecticut, Main, New Jersey, Rhode Island, Virginia, and Maryland. The study served to determine how many times Florida blueberries were advertised in these markets. It was found that Florida blueberries, not including organic, were offered for \$2.03 more

per pint on average than other advertised blueberries during a 21-week period (Qu and Rumble 2016). Retailers in only eight of the 13 states advertised Florida blueberries during the season (Qu and Rumble 2016). The Fresh from Florida logo was only used by three retailers, all in different states, Florida being one of them (Qu and Rumble 2016). This research uncovers a few important pieces of information for the Florida blueberry industry. The lack of advertisements for Florida blueberries suggests that perhaps Florida blueberries are not reaching these retailers, the retailers are not capitalizing on advertisements featuring growing-location, or the retailers are not familiar with the Florida blueberry season. However, the lack of advertisements also presents an opportunity for the Florida blueberry industry. Through increased marketing efforts toward consumers, the consumer demand for Florida blueberries throughout the East Coast could increase, resulting in increased value among the retailers to promote Florida blueberries. The industry must continue to increase awareness and demand for Florida blueberries throughout the state and the East Coast to inform consumers and retailers of the benefits of buying Florida blueberries, including the freshness over Chilean berries already in the store coolers and the pride of buying the first domestically-produced blueberries of the year. This may also include implementing marketing tactics directly targeted to retailers.

The Consumers

The increase in production and marketer presence, in both the U.S. and Florida, has been met with a similar increase in consumer demand. According to the U.S. Highbush Blueberry Council, the number of households that reported buying blueberries in the past month doubled from 2008-2014 (Valentine 2014). Younger and more diverse consumers were reportedly entering the purchase group and they cited health benefits

as reasons they chose to consume blueberries (Valentine 2014). Research conducted by the University of Florida PIE Center supports these findings.

Most blueberry purchasers surveyed by the PIE Center (Taylor, Rumble, and Anderson 2016) had some college education but no college degree, while most nonpurchasers were high school graduates. The purchasers shared common characteristics: food quality was important, they were interested in cooking, they planned meals and liked to try new products, they read product labels, looked for new recipes, and were interested in the health aspects of food products. For nonpurchasers, they overwhelmingly agreed that food quality is important, but their interest in health benefits and reading product information was much lower than those who already purchased blueberries.

Both current purchasers and non-purchasers agreed that blueberries are nutritious, but purchasers were much more likely to say the berries are delicious. Purchasers did not buy more blueberries than they currently did because of the perceived availability of blueberries, price, quality, and their enjoyment of other fruits. Non-purchasers said they did not buy blueberries because of enjoying other fruits, price, not liking blueberries, and not knowing how to prepare meals using blueberries.

Consumers overwhelmingly reported purchasing blueberries at traditional supermarkets (e.g., Publix, Winn-Dixie, Kroger), followed by big box retailers (Wal-Mart, Target), and farmers markets. Traditional supermarkets were preferred because of the affordable price, availability, convenience, and high quality. These stores were perceived as not carrying locally grown products. Big box retail stores follow the same trends as traditional supermarkets, but the perception of quality was lower for the big

box stores. Farmers markets have the greatest perception of supplying locally grown blueberries, but only 66% of consumers perceived farmers markets as having locallygrown produce. A slightly lower amount of consumers believed that farmers markets allow them to have direct contact with the growers.

When consumers take their blueberries home, they reported eating them straight out of the container or as a supplement to other foods two to three times per month or more. Consumers reported using blueberries in drinks or smoothies, but slightly less frequently than out of the container or as a supplement to other foods. They reported taste, nutrition, smell, size, color, and freshness as important when deciding whether or not to buy blueberries. Other important purchasing attributes for this consumer group were almost equally weighted and included convenience, price, supporting local farmers, if the berries are in season, and growing location.

Consumers and Florida

Keeping in mind the specific window for Florida blueberries, it is important to note that 92% of respondents reported purchasing blueberries in summer, in comparison to the 65% that buy them in spring, when Florida's blueberries are in the market (Taylor, Rumble, and Anderson 2016). This finding aside, the PIE Center found that 30% of consumers prefer to buy blueberries grown in Florida (Taylor, Rumble, and Anderson 2016). When the 10 top producing states for blueberries were presented to the purchaser group in the survey, Florida was overwhelmingly reported as the state that people would like to purchase blueberries from. All of the other states that were presented only earned less than nine percent agreement. This finding may have some bias due to the high amount of Florida consumers in the survey sample.

All of the respondents to the PIE Center study (Taylor, Rumble, and Anderson 2016) were asked if they believed that they could correctly identify what months Florida blueberries are in season. Out of all respondents in the study, only 16% believed that they could correctly identify Florida's blueberry season. The 16% that believed they could correctly identify Florida's market were then asked to pick out the months of the year that blueberries are available from Florida. Of this 16%, half were able to correctly identify April and May correctly (the bulk of the season), but only 28% knew to begin looking for blueberries in March. Improvement is needed in this area to educate consumers about when to look for and buy Florida blueberries. Most people chose the summer months of May through July as Florida's blueberry season. This indicates that consumers not only look for blueberries during the summer months, as mentioned previously, but they are also looking for Florida berries either very late in the season or not during the Florida season at all. Additionally, 47% of consumers reported not knowing whether they had seen Florida blueberries in their local area. Fifty-seven percent of consumers reported rarely or never looking for Florida blueberries in stores. These findings suggest marketing opportunities to increase the awareness of Florida blueberry season, but also the ease in which people can find out where their blueberries are coming from. Specific demand for Florida blueberries will only be generated if consumers know when to look for them and can differentiate Florida blueberries from all other production regions.

As for their preferences for package sizes of fresh blueberries, most people preferred to buy one pint of blueberries at a time in the traditional clamshell. There was more interest in buying two pound packs than six-ounce packs when consumers were

asked to identify their preferred package size by looking at side-by-side options. This may indicate that consumers are demanding more blueberries in bulk instead of using them as a small snack. When looking at these packages, most people agreed that they could easily identify where the berries come from and they checked to see where the berries were grown. Only 35% of consumers said that they would make a purchase based on where the berries were grown, despite reporting that they looked for the origin and indicating Florida as a preferred growing location.

Overall attitudes about Florida blueberries were positive, with consumers indicating sweetness, high quality, cleanliness, and freshness as favorable attributes. Freshness and taste were the leading attributes driving consumers to purchase Florida blueberries. As for the current information available regarding Florida blueberries, it was generally thought to be transparent, meaning that consumers believe the information they want is easy to obtain and is freely available to them. Consumers indicated that they did not receive complete, timely, and detailed information about blueberries. When asked how they would like to learn more about Florida blueberries, most people indicated they would like to visit a website (57%) or read a printed fact sheet or brochure (41%). TV coverage and demonstrations were much lower, but still were identified as favorable learning sources by at least one-fourth of the respondents.

The influence of health benefit awareness

Blueberry benefits have been studied widely, and consumers have armed themselves with this information in recent years. The United States Highbush Blueberry Council found that 99% of the population believes that blueberries are healthy and that 84% of these people can cite a specific health benefit, up from 39% in 2004 (USHBC 2013). At restaurants, consumers perceive items containing blueberries to be healthier

than other items (Valentine 2014). PIE Center research (Qu, Bradley, and Rumble 2016) showed that consumers knew that blueberries can help ward off heart disease (83%) and lower risks of cancer (82%), the two leading causes of death in the United States (Centers for Disease Control and Prevention 2016). Florida Commissioner of Agriculture, Adam Putnam, joined with the Moffitt Cancer Center in 2016 to help make the cancer-fighting properties of superfoods, including blueberries, known to Floridians (Rosica 2016). This was a great step forward for the Florida blueberry industry to increase demand and awareness for blueberries. Consumers were also able to identify other blueberry health benefits, but there was room for improvement to increase the awareness of health benefits to the whole population. The lesser known benefits of blueberries include helping to revert aging, improving memory, and strengthening eyesight (Qu, Bradley, and Rumble 2016). Increasing the knowledge of these benefits of this superfood may help to increase demand for blueberries.

Competitive Analysis

An increase in production from other states and countries has increased the overall availability of fresh blueberries in the United States, providing the market with a year-round supply of blueberries.

Domestically, 38 states produce blueberries, and 10 of these 38 produce more than 98% of all U.S. berries for commercial use (USHBC 2016). Florida is one of these ten, but so are Georgia and California (USHBC 2016), two states that produce berries that encroach on the Florida market. In-person interviews with Florida blueberry growers and marketers revealed that Georgia and California are the largest domestic threats to Florida production. Beyond these two states lies the threat of international berries

affecting the Florida market. According to these same interviews, Chile poses the greatest international threat to Florida's market, but Mexico should not be overlooked.

Georgia

In 2014, Georgia's blueberry production exploded. Total utilized production reached 92 million pounds, with a value of \$109 million (USDA 2015b). Increased production moved Georgia to the number one producing state in the nation for the first time. Georgia produced 52 million pounds for the fresh blueberry market, a 48% increase from 2013 (Figure 4-3). In 2014, Florida's fresh blueberry utilized production was 19 million pounds, in comparison (Figure 4-2).

Increased blueberry production in Georgia is significant to the Florida market window. In-person communications with Florida blueberry growers and marketers revealed that Georgia enters the market with blueberries between April 15 and 21, which affects the Florida price in late April and early May. If Georgia has an early crop, the prices Florida growers receive will drop and growers will often stop picking as the price received does not substantiate the cost of picking and packing the remaining crop. To illustrate the encroachment of Georgia blueberries during Florida's blueberry season, Figure 4-4 shows the movement of Georgia berries through the United States with blue boxes marking Florida's production window.

The data in Figure 4-4 show the movement of berries from Georgia beginning on April 30, which is near the very end of the Florida's typical blueberry season. Many growers currently watch the Georgia production market closely during the Florida season, as Georgia's crop timing has a dramatic effect on both the movement and the prices of Florida blueberries. While Florida blueberries are still on the market, growers

should continue to monitor Georgia's production for cues on how the market will fluctuate.

California

While Georgia was considered to be the largest threat to Florida growers, California also poses a credible threat to the Florida market. According to the California Crop Harvest Calendar (Pick Your Own 2016), California blueberries come into season on May 15. This is at the very end of the Florida season, but just like Georgia, an early crop in California will lower the market price for Florida when the last of the berries are in the market. If Georgia and California both enter the market early, or if Florida has a late crop due to weather, then Florida is at risk to be pushed out of the market by the increased volume from both states. Figure 4-5 mirrors the May 15 date from the harvest calendar. May 15 is at the end of the Florida season, but still may influence prices that Florida growers receive as retailers anticipate an early California crop or a large volume coming from California.

Production amounts in Florida were smaller than the amounts supplied by direct competitors, but the production values of Florida blueberries are still high throughout the years, even when compared to the higher producing states (Figure 4-6 and 4-7). Florida blueberries are very relevant to the entire U.S. blueberry industry, given the high production value seen in Florida in recent years, and marketing will serve to increase demand for Florida-grown blueberries.

Many of the top produce marketers contract blueberry growers in Florida, Georgia, and California, so the movement data, production amounts, and production values presented in this section were especially important because marketers had many options when working to fill their orders, especially as the Florida season came closer to

the end. Because the data supported the end of the season being inundated with berries from other states, it was especially important from a marketing perspective to keep focus on the beginning of the Florida market. The weeks between March 15 and April 15 were especially important for growers to receive the highest prices of the season, with the starting date of March 15 being dependent on how early the crop comes into the U.S. market. Marketing efforts should begin well before March 15 to inform the public about the coming season and continue throughout the time that Florida blueberries are on the market.

Chile

Another key to answering the question of the security of Florida's market window is the Chilean blueberry market. Chilean berries pose a different threat to the Florida window than the domestic states because Chile exports blueberries to the U.S. during the winter months. In recent years, imports to the U.S. market have increased, but have continued along the same timeline. Figure 4-8 shows the amount of Chilean blueberries imported by the U.S. and the decrease of Chilean blueberry imports through March, leveling off to zero by mid-April. The movement data graph (Figure 4-9) mirrors this finding. Import data indicates that Chilean berries are still available in the U.S. during the beginning of the Florida blueberry season when grower prices are the highest (Figure 4-9). Interviews with growers and marketers in Florida revealed that a few large retailers in Florida do not offer Florida berries on their shelves until they can no longer buy the lower-priced Chilean fruit. Often this is April 1 or later, after the early Florida berries have been available for more than a week. This presents an opportunity for the Florida industry to coordinate and find retailers that are willing to buy their berries based on the freshness, not on the low price.

Chile also posed threats beyond the sheer volume of blueberries it produces. Marketing efforts in the country have increased, reaching countries all over the world. The U.S. Highbush Blueberry Council boasts the Chilean blueberries as being "Winter Fresh Blueberries" (USHBC 2016b) that help keep the domestic market stocked year round. In Chile, the Chilean Blueberry Committee has a highly interactive website with actions similar to the blueberriesfromflorida.com site. The group also has a YouTube channel dedicated to showing blueberries from the field and all the way through the production process.

The marketing presence from Chile does not pose a threat until Florida begins to enter the market. At this point, Chilean berries have been on the market for a while and will begin declining in quality. It is extremely important to make retailers and consumers aware that a shift in supply is available, offering fresher berries from Florida. Retail communications and clear labeling of Florida berries become even more important at this stage.

Mexico

Mexico presents an interesting challenge to the U.S. blueberry market, as Mexican blueberries are grown counter to the U.S. market, but are still present into May when the volume of U.S. production begins to enter the market. When looking at Mexico's data, it is apparent that when Mexican blueberries enter the U.S., they are moving through Texas and not further East where Florida blueberries are grown. This is counter to Chilean blueberry imports that USDA market news reports show coming into the U.S. from Tampa, Miami, Texas, Atlanta, New York, Orlando, Philadelphia, and Los Angeles. Even though the import data below (Figure 4-10) shows Mexican blueberries still entering the market during Florida's window, the fact that they are not ending up in

the eastern states may be why Florida growers and marketers do not unanimously name Mexico as a major threat, like they do for Chile.

While there is stiff competition internationally and domestically, there is good news for the Florida production window. Looking at historic production by month, the Florida window is still well defined. As Figure 4-11 shows, there is a clear dip in the available pounds between the imports of berries at the end of winter and the domestic production of blueberries during the spring, the Florida window and into summer. Production on all levels has increased over the past few years. Figure 4-11 shows that mid-March, when Florida blueberries first become available, is crucial to the success of the industry. Florida is the first state to come into the market and, as soon as all the Chilean blueberries go out of season, Florida blueberries have the whole market until Georgia comes in season mid-April.

From a marketing perspective, the beginning of the season is the most crucial time to ensure consumers are in stores requesting Florida blueberries specifically. Increased consumer demand will only happen with increased consumer knowledge of the Florida season and of the benefits of Florida blueberries. Demand for Florida blueberries will increase with increased consumer awareness of the Florida growing season and ease of identifying Florida blueberries in stores, because consumers will know to look and ask for Florida blueberries specifically. It is equally as important to educate retailers about the timing of availability for Florida blueberries. As consumer demand for Florida blueberries increases, there will need to be blueberries in stores to meet this demand. Communicating the value that retailers can gain from promoting Florida blueberries will be vital to supplying the demand.

SWOT Analysis

A SWOT analysis is a useful tool for identifying the strengths, weaknesses, opportunities, and threats (SWOT) a company or organization faces (Wysocki, Wirth, Farnsworth, and Clark 2015). Wysocki et al. (2015) explain that strengths and weaknesses are internal to a firm and that opportunities and threats the firm faces are external. The goals of the SWOT analysis are to determine the firm's competitive advantages and develop tactics to capitalize on these advantages. The section following the SWOT analysis, entitled "SWOT Implications," identifies the competitive advantages and disadvantages for the Florida blueberry industry. In conducting this SWOT analysis for the Florida blueberry industry, the basis for the findings was provided through information from interviews with marketers and growers, as well as the consumer and producer surveys conducted by the PIE Center.

Strengths

Florida grows Southern Highbush variety. Southern Highbush blueberry varieties generally contain fewer seeds and are sweeter than other varieties. Southern Highbush varieties are only grown in southern states and are not found in many of the other blueberry-producing areas of the U.S. Additionally, large blueberry marketing companies and small, grower-operated companies are all growing the same varieties in Florida. This allows small growers to compete with the large growers that selling under prominent marketing companies because no proprietary varieties currently exist in Florida. This means there is still room for small growers to capture some of the Florida blueberry market.

Unique market window from mid-March to mid-May. Florida offers the first domestic blueberry to the United States market each year. From late-March through

May, blueberries from Florida are the freshest available in the U.S. Florida fills the market gap between Chilean and Mexican blueberries exiting the U.S. market in March and Georgia blueberries entering in May. The unique window has historically afforded Florida growers higher prices from the last week of March through mid-April than prices seen at other times of the year.

Connection to the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) research. UF/IFAS is an established entity that continues to produce new and improved blueberry varieties suited to Florida's unique climate. The infrastructure of UF/IFAS is designed for blueberry growers to be able to receive advice from researchers and extension agents about growing practices while also suggesting improvements to existing varieties based on experience.

High quality standards and grower practices. All Florida blueberry growers follow USDA quality and safety guidelines and participate in several audits per season. Most blueberry marketers also enforce strict, company-developed best practice standards that exceed the USDA guidelines. The marketing groups rely on their contracted growers to monitor their own fruit quality in order to maintain brand reputation. The strict standards have led consumers to express that they expect quality fruit from Florida.

Established association for promoting the industry. A strong partnership exists between the Florida Blueberry Growers Association and growers, marketers, and retailers of Florida blueberries. Many blueberry growers report using FBGA resources when learning how to promote their blueberries. Fresh from Florida is also an existing partner with FBGA.

Blueberry attributes. Health benefits attributed to blueberry consumption are becoming widely recognized by consumers, which is driving them to buy more blueberries. Initiatives exist to ensure that consumers are aware of the blueberry health benefits, including the endorsement of the blueberry as a "super food" by Commissioner Adam Putnam and the Moffitt Cancer Center. Additionally, blueberry recipes are widely available on industry websites, including several marketers' websites, the Fresh from Florida social media sites, and the FBGA website.

Weaknesses

High production costs. Florida blueberry growers spend more money per acre than growers in other states due to Florida's unique climate. Costs that support the health of the blueberry plants and combat diseases are higher than in other blueberry producing states because of the increased application rates needed in Florida, which increases the cost of production.

Growing size of the market. Growers believe that big, prominent marketers do not provide the local feel needed to promote blueberries as being from Florida. Additionally, an increase in the number of growers in Florida results in more blueberries needing to be moved and potentially lower average prices for all Florida growers. The practice of shared trucking to sale sites, due to the growing size of the blueberry market, causes confusion if fruit is rejected at retail sites. Growers believe marketers should require retailers to look at pallets of blueberries individually and identify problems with individual growers, instead of rejecting whole truckloads.

Lack of consumer knowledge. Research indicates that consumers are unaware of the Florida blueberry season. Lack of consumer knowledge leads to lack of demand for Florida blueberries because consumers cannot demand Florida blueberries

if they do not know when they are available. When blueberries are in season, consumers do not see them in stores until Chilean berries are off the market. This creates confusion for consumers that are conditioned through marketing to look for Florida blueberries at a specific time.

Short window for marketing. The Florida blueberry season is variable due to weather and some years the season begins in March and other years it may be April. Because of the variability in the season, growers often provide different responses when asked when Florida blueberry season is. Differing responses in seasonality contribute to a weakness because the lack of a unified message creates conflicting marketing materials and confused consumers. This makes it especially difficult for small growers, not marketing under a prominent marketer, to promote for the season.

Regardless of the timing of the season, a maximum of six weeks exists for Florida growers to receive high prices in the national market, but it costs growers the same amount to pack blueberries no matter the prices received for a specific time period. Additionally, large marketers are not willing to alter clamshell labels to include the Fresh from Florida logo, or any other logo denoting the growing state, during the unpredictable season. This is not a cost effective practice because marketers cannot reuse labels for all marketing regions if they need to put a special designation just for Florida on the label.

Trust. Marketers do not always believe they are getting the most reliable information on crop volume estimates from growers. A perceived lack of accuracy makes it difficult for marketers to contact retailers and other buyers to forecast sales based on accurate volumes. Marketers also do not trust the growers to be timely in their

crop volume reports or in the ability to reach the growers in a reasonable time for making sales.

Grower trust in marketer practices varies by grower. Growers generally have a positive attitude about the outcome of working with a marketer and tend to be loyal to marketers. The majority of growers feel positively toward their marketer's business ethics and quality of their work. However, some growers voiced concerns about working with a marketer. Some growers do not trust that their fruit will be accepted at the buyer's location because rejection criteria is not uniform or regulated and is not relayed until the marketer has moved the fruit. Once the marketer receives the fruit, the grower loses contact with it. Some growers believe that the chance of rejection could be lessened if the marketer shared information about the destination of the fruit and specifics about quality standards in that location.

Unregulated and non-unified market. Little communication exists for marketers about volumes crop volumes during the season. Increased communication about blueberry movement and prices to reporting services (e.g. USDA Market News) could help reduce the low prices that are sometimes accepted early in the season. Marketers sometimes take low prices early in the season to avoiding risk due to market uncertainty, which is a practice that leads to "killing of the market". The high prices desired and expected by growers will not be recovered if low prices are taken early in the season. At the time of this project, there is no way for other buyers and growers to know how the market will vary day-to-day because the volume data for the whole industry is not currently available.

Opportunities

Increase market coordination. Growers and marketers alike mention a desire for a more unified presence in the produce market for Florida blueberries. The opportunity exists to create a deliberate and cohesive marketing perspective for all members of the industry. Unified messages could be developed to communicate about the industry and the season to consumers and retailers. The unified message could be used in all communication, including any USDA information, and on websites including FBGA and all other informational sites that promote Florida blueberries.

The unified message may have to be more general than specific. This includes using "spring" as the Florida blueberry season, as opposed to specific months, due to weather fluctuations. FBGA could be used as a platform to increase communication between all growers and marketers throughout the season. Specifically, communicating accurate volume information about movement and pricing may help to ensure higher prices for all growers for longer periods of time during the season. Current market prices are available on the FBGA website, but accurate and current volume reports could increase the likelihood that marketers will make sales based on accurate market information, prolonging higher prices. FBGA could also partner with retailers as a unified front to promote Florida blueberries and the Florida season at retail locations carrying Florida blueberries.

Increasing the labeling of Florida as the growing location of blueberries is another opportunity. Fresh from Florida offers stickers that can be added to existing clam shell labels to increase the visibility of Florida-grown blueberries. Rebate programs exist for growers wishing to implement FFF labeling on clam shells.

Communication could increase between marketers, growers, and retailers. Marketers could communicate to growers the retail buyer expectations so blueberries have less risk of being rejected which would help to keep retailers accountable for rejection decisions. Marketers could also follow up when fruit is rejected to learn why it was rejected by requesting the USDA inspection report that led to the rejected load. This could clarify the reasons for the rejection to be relayed to the grower for the next shipment.

Opportunities exist for growers to grow specialized varieties to differentiate Florida blueberries. It is a strength that the whole Florida blueberry industry is growing similar varieties because the smaller growers can compete with the larger growers and stake a claim in the market. If growers in Florida could leverage the association with UF/IFAS research, there may be an opportunity to differentiate blueberry varieties from other states. Differentiation could create market opportunities for untapped demand for potential blueberry varieties.

Educate consumers. Consumers must become aware of the differences of Florida blueberries from other blueberries that are available at the beginning of the Florida season. When the last of the Chilean berries and the first of the Florida berries overlap in timing, Florida blueberries can be differentiated through freshness. They are not shipped for weeks from other countries and may have been in the field the day before the consumer buys them. This also presents the opportunity to promote Florida blueberries as the first domestic blueberry each year or the first of the U.S. season. Consumers could also be educated on the blueberry growing locations in Florida to better connect them to local production.

Fresh from Florida is an already established branding program that growers and marketers can take advantage of to further differentiate Florida blueberries from blueberries grown in other locations. Seventy-one percent of surveyed consumers indicated they would choose the package with the FFF logo over others in the same refrigerated case (Taylor, Rumble, and Anderson 2016). FFF offers stickers with the FFF logo that can be added to marketer clamshell labels and FFF can provide coordination of several marketing activities. Increase knowledge of the Florida blueberry season to uncover the demand

A large part of educating consumers comes from increasing consumer knowledge of the Florida blueberry season in order to uncover consumer demand. If people know when and where to look for Florida blueberries, they are likely to begin asking for and demanding them. The opportunity exists to remind consumers of the upcoming blueberry season prior to the start of the season and then to implement a more aggressive marketing campaign throughout the season. Increasing consumer experiences with Florida blueberries may also serve to increase demand and consumer knowledge of the Florida season.

Health-conscious consumers. Increased communication and promotion of blueberry health benefits could encourage the purchase of blueberries by consumers.

Health benefit awareness could be increased for all age, education, and income groups, but lower education was found to be an indicator of lower blueberry health benefit knowledge, so this may be the initial targeted opportunity for health benefit education. Health benefit education is especially applicable to the elderly as well as young children.

Social media and community reach. FBGA currently uses the Blueberries from Florida website to provide information to consumers through blog entries, health tips, and recipes. There could be an opportunity to build the Blueberries from Florida social media presence to better connect with consumers. Both the FBGA website and the Blueberries from Florida website need to have the Florida season easily identifiable to visitors and should offer accessible links to the social media sites.

Another opportunity within social media could entail a social media kit for all growers to aid their individual farm promotions as well as for delivering a unified industry-based message. The social media kit could be available through FBGA and could include examples of social media posts, copy for websites, and information on how to run a successful social media account.

An important opportunity within community outreach could be increasing the amount of information available about U-picks for growers. Growers that currently use U-picks for direct marketing indicate that they are easy to start and promote, but is an opportunity to provide more information about the benefits of U-picks to those not currently using them. All of the information about starting and maintaining a U-Pick operation could be made available through FBGA. Making U-pick information more available to growers may encourage them to incorporate U-picks into their businesses, which could increase consumer experiences with Florida blueberries and increase their likelihood to seek out Florida blueberries specifically.

Threats

Increasing volume of other production regions. An encroachment on the Florida market by domestic and international growers, both in volume and in timing is being experienced because of the year-round need for blueberries. Retailers do not

want to buy higher-priced Florida fruit until the lower-priced Chilean fruit is cleared off the market and Chile is using controlled atmosphere to better dictate blueberry ripening and delivery time. This increases the amount of time blueberries from Chile can be sold to the U.S. market. Additionally, the Chilean Blueberry Committee has increased social media and overall marketing reach in the U.S. and other countries.

Other produce in the marketplace at the same time. The global availability of all fruits has led to a variety of produce selections being available year-round. This means that blueberries must compete with strawberries, raspberries, blackberries, and many other fruits during the season. Consumer preference of other fruits over blueberries and price elasticity plays a role in consumer decisions on which fruits to purchase, regardless of their desire to buy Florida-grown produce. In fact, PIE Center research (Taylor, Rumble, and Anderson 2016) shows that 44% of blueberry purchasers do not buy more blueberries in general because of their preferences for other fruits.

Consumers generally cannot tell the difference between blueberry

varieties. Consumers know that the blueberry they bought is sweet or tart, not that it is a Southern Highbush from Florida or a different variety grown in another state. If consumers do not recognize the difference in taste or quality of Florida blueberries, demand will not be generated for them.

Low reliability of labor. Blueberries grown in Florida are completely labordependent for harvesting and labor crews naturally move with different crops and higher prices. Workers in Florida must work harder when picking blueberries because there is less output per acre in Florida when compared to other eastern producing states.

Laborers move onto other states as soon as they begin harvesting, even if there is still work to be done in Florida in order to secure housing and future jobs. Growers are then left with fruit still on the bush with no one to pick it.

Retailer practices. Some large retailers buy based on price, as opposed to growing location of the blueberries, and marketers believe that Chilean blueberries will be placed ahead of Florida berries, as long as Chilean berries are available for a lower price. Florida blueberries have a historically higher average price than Chilean blueberries which makes it more expensive for retailers and customers to purchase them early in the Florida season. Consequently, lower-priced Chilean fruit stays in stores until a clean break can be made for Florida fruit to come in.

There is also very little advertising done based on the growing location of blueberries. Retail advertisements may display the Fresh from Florida logo, but may also simply state them as southern grown or sweet berries. The customer, regardless of preferences, has no control over what is in the produce aisle because the retailer decides what is available. It must be noted that retailers use this type of structure based of the nature of their business. They must buy in a way that is best for their bottom line.

Another weakness that comes from retailer practices is marketer uncertainty of retail rejection practices that are non-uniform and unregulated. Marketers report berries being rejected by a retailer one day and the same fruit being bought by the same retailer the next day. This is often referred to as market disease. If retailers do not have consistent buying practices, this makes it difficult for marketers and growers to predict sales.

SWOT Implications

Competitive advantages for the Florida blueberry industry exist if the industry's key strengths are utilized toward the available opportunities.

One opportunity for the Florida blueberry industry is to increase social media presence and community reach, especially pertaining to the Florida blueberry season. FBGA, which is an already established source of information about Florida blueberries, can establish this community outreach through existing internal resources.

Another resource the industry is fortunate to have is its connection with is the University of Florida. The University has experts and students willing to help establish social media campaigns, industry promotional materials, and consumer research projects. By utilizing both FBGA and UF/IFAS, the industry can use social media and community outreach platforms effectively. The connection to the University of Florida and Fresh from Florida also lends to the industry's opportunity to educate consumers about the health benefits of blueberries. Aligning with the University will lend credibility to the claims of blueberries as superfoods.

Additionally, the already-established FBGA is a key strength because it can aid in market coordination efforts. Efforts are already underway by FBGA, such as seasonal industry meetings and messages on the FBGA website from the president to growers. FBGA can be used as a platform to communicate a strategic marketing perspective to all members of the industry that will allow for a unified message to be delivered by the state to both retailers and end-consumers. The message can be as simple as saying that consumers and retailers should begin looking for Florida blueberries at a specific time due to weather events or to promote a new industry initiative. Involving the grower-members of FBGA will allow for more exposure on more platforms to communicate the

industry's messages. Growers can also be unified through FBGA to accurately forecast crop volumes, which will lead to better estimates for marketers and retailers, strengthening these relationships.

Where competitive advantages exist, so do competitive disadvantages. One weakness that was identified for the Florida blueberry industry was the lack of consumer knowledge about the Florida season. The increasing volume of other growing regions threatens to overshadow the Florida market. Demand must exist specifically for Florida blueberries to ensure that the Florida season is still important to consumers. Consumers cannot generally tell the difference in blueberry varieties, so the demand for Florida blueberries must come from increasing consumer knowledge about the freshness of Florida blueberries compared to Chile. Demand may also come from increasing pride in purchasing blueberries grown in home-states or in the United States, as opposed to purchasing from other states or countries.

Retailer practices, coupled with the increasing volumes of production from other areas, present unique challenges to the Florida market. The increase in production from other states and countries, as well as retailer practices that do not currently promote blueberries based on growing region, will have to be addressed by both marketers and the industry. Both entities have an interest in making sure that retailers know when Florida blueberries will be available. The targeted marketing tactics for the Florida blueberry industry are developed by knowing how these key advantages and disadvantages tie to the opportunities and threats to the industry.

Target Markets

PIE Center consumer research (Taylor, Rumble, and Anderson 2016) indicates that the primary household grocery shoppers in the survey sample are white females

between the ages of 30-69 years old. The majority of shoppers earn less than \$30,000 or from \$30,000 to \$49,000 per year. Marketing efforts should target consumers in these demographic groups. Beyond simply identifying who the main grocery shoppers are for households, it is important to recognize other groups that also influence the blueberry industry. In a conversation with a longtime blueberry grower, it was mentioned that minority groups should not be discounted as target markets, as these groups are growing in size in the United States. For this reason, marketing tactics will serve to reach the primary grocery shoppers as indicated by the PIE Center research, but will not be limited to just this group. These tactics will serve to reach several groups of current and potential buyers.

Suggested Tactics

The tactics take on a few different forms. They span a spectrum of audiences, from nationwide marketers to small growers that pack and sell their own berries and for the Florida Blueberry industry as a whole. Based on information from several growers, some of the tactics suggested for individual growers may be implemented by their marketing groups instead of the growers themselves. The proposed tactics provide much of the necessary information, but may contain some ideas that have nuances that need to be determined upon implementation. Overall, the tactics are split into two large groups, Fresh from Florida tactics and Florida Blueberry Growers Association tactics, within which the individual grower tactics are included.

A two-pronged approach is recommended, with tactics to reach consumers to increase overall demand and tactics to reach retailers to increase their awareness of the availability of Florida blueberries. An integral part of this plan is to designate a specific time period that all information sources use to promote the Florida blueberry season.

For the purposes of this plan, March through May is used as the specified season to be consistent with previous FBGA marketing materials. The industry should first determine the preferred season dates and make them available to all outlets publishing Florida blueberry information for overall uniformity.

The tactics are broken down into feasibility by operation size, with small growers being those with up to 20 acres and large growers having more than 20 acres of blueberries. Growers wishing to implement the following tactics can choose based on the farm size recommendations, but there may be opportunities within each tactic for growers of all operation sizes to modify it for their needs. For growers that use a marketer, some of these tactics may need to be adopted by the marketer in place of the grower.

Fresh from Florida Tactics

Consumers indicate strong, positive attitudes toward the Fresh from Florida (FFF) logo, as opposed to a label only with a state origin. Seventy-one percent of people surveyed say they prefer a label with a Fresh from Florida logo printed on it, as opposed to just the growing region (Taylor, Rumble, and Anderson 2016). The Fresh from Florida labeling preference is coupled with low consumer knowledge of the Florida blueberry season. Fresh from Florida has specialized tactics in place for several commodities that have helped to increase the awareness of their growing seasons. It is recommended that FFF be the vehicle to help increase the awareness of the growing season. Based on FFF's expert recommendations, seasonality is best communicated while the crop is in stores. Some communications prior to the season may be beneficial, with the main call to action for consumers existing during the season.

For Fresh from Florida to implement any of these suggested tactics for the industry, the FBGA should consider and industry-wide financial commitment to FFF to allow for the creative work to be done by FFF. More tactics suggested by FFF experts are below, separated by tactics for FBGA and for individual growers.

Digital campaign. This tactic is suggested for FBGA. A digital campaign is a marketing campaign that is conducted through the Internet and includes social media, website postings, and marketing through mobile phones. A digital campaign is especially useful because it allows for quick reactions to market fluctuations.

FFF's experience with digital campaigns indicates that consumers are conditioned to act very soon after seeing a message. Therefore, it is best to capture a consumer's attention when they can go and buy the product that same day, instead of running an extensive campaign prior to Florida blueberries being available.

Facebook is a useful tool in digital marketing and FFF already mentions blueberries during the season on the FFF Facebook page. The opportunity exists for FBGA to utilize Facebook advertisements to specifically target consumers through the FFF existing network. Facebook ads show up in consumer Facebook news feeds as an informational article or as a link to other websites. This tactic can target specific demographic groups at planned-out time periods. When consumers click on the Facebook ads, they should link to the BlueberriesfromFlorida.com webpage or Blueberries from Florida social media. The cost varies for Facebook ads: FFF will do the creative and placement work, but the ads must be paid for by FBGA.

Another digital marketing opportunity is with banner advertisements. FBGA would buy advertising space in the banner area of websites such as epicurean.com,

recipes.com, and allrecipes.com. Banner ads are used to target potential consumers who are in relevant geographic areas with a call to action. For FFF to implement banner ads for a specialty crop, the typical budget is \$28,000 for the season.

Another section of digital marketing could include FBGA (with FFF help) contracting paid bloggers to write about experiences with Florida blueberries either in stores, restaurants, or in their recipes. Bloggers could post recipes and reviews of the recipes during the season with special reference to Florida blueberries. FBGA could establish partnerships with restaurants to feature Florida blueberry menu items along with the FFF logo. Regardless of the use of a blogger, FFF will help promote Florida blueberries in restaurants.

The positive aspects of a digital campaign include being able to reach a high amount of the target market and being able to change the advertising messages depending on how the crop volume fluctuates during the season. Also, when bloggers write about their first-hand experiences with Florida blueberries during the season, this may entice consumers to try the recipe or the menu item, which benefits both Florida blueberries and Florida-based restaurants. A few negatives that exist with digital marketing include the risk of missing out on reaching older consumers that may not be visiting digital sites and that each online advertising venture costs the industry money that could be spent elsewhere. It may also be difficult to commit restaurants to adding new menu items for a short period of time.

Kids in the Kitchen promotion through Family Features. This tactic is suggested for FBGA. A Kids in the Kitchen promotion has been done already for blueberries that included mostly recipes and write-ups that briefly mentioned the health

benefits of blueberries. A new feature could revamp the existing publication to include more health benefits and a stronger emphasis on the growing season, along with the recipes. Family Features writes the copy, does the creative work, and places all of the features that are distributed by newspapers, magazines, blogs, and social media throughout Florida and the East Coast. Family Features guarantees 3 million impressions with a \$10,000 budget and the cost would be incurred by FBGA.

Chef Justin Television Segment. This tactic is suggested for FBGA.

Chef Justin Timineri is an international culinary ambassador who represents Florida and is the chef on a television series called "How to Do Florida". The cooking segment on this show focuses on demonstrating how to use Florida's agricultural offerings in different recipes. FBGA could work with FFF to produce clips of Chef Justin speaking about several different ways to use Florida blueberries with direct emphasis on the fruit being in season.

The video segments could be distributed through Blueberries from Florida social media or through email blasts. Making the segment into an Instagram clip may also help the reach of the video. Earned media is also a way to distributed the video segment to major media outlets in Florida and on the East Coast. The goal would be to have the video run on news shows in cooking or health segments. For earned media, the video clip would be accompanied by a gift as an incentive for the media outlets to run the clip. There could also be the option to use Chef Justin as an interviewee for satellite tours for earned media opportunities beyond the video clips.

This tactic would be helpful for the industry because Chef Justin has experience with Florida cuisine and has already done several features for Florida commodities.

However, the video segments would have to be creative enough to capture the attention of social media users and news outlets and earned media incentives may be costly for the industry.

In-store promotions. This tactic is suggested for FBGA. In-store promotions include blueberry sampling opportunities and shopping cart promotions. For sampling opportunities, an external company could set up sampling tables in major grocery stores during the Florida season which would direct people to buy Florida blueberries during that shopping trip. This tactic could be used to reach current non-buyers of blueberries more effectively than other methods because they would have the chance to taste the berries before they purchase them. With a \$15,000 budget, a group identified by FFF will coordinate the sampling for FBGA in major retail stores.

For shopping cart promotions, promotional cards could be placed in the frontinside of a shopping cart basket and could feature a message informing consumers about blueberries being in season. To reach 1,400 retail stores in Florida, the budget is \$50,000 per month.

Both in-store sampling and shopping cart promotions reach consumers at the point of purchase and may encourage immediate purchases. However, it is pivotal that Florida blueberries are available and clearly labeled at the stores where these promotions run.

Billboards. This tactic is suggested for FBGA. Billboards could be placed on major roadways in Florida displaying the simple call to action that Florida blueberries are currently in season. Consumers could also be urged to go to their nearest store and buy blueberries while they are in season. Based on previous FFF campaigns, billboards

work well. The typical budget for billboards is \$50,000 for the season and the cost of securing the billboards would be incurred by FBGA.

Billboards are a worthwhile tactic because of their high visibility and ability to reach a large number of people. They could also target Floridians and tourists at the same time and there is a captive audience on Florida highways. However, billboards are expensive to rent and the message must be succinct to be read by motorists.

Labeling. This tactic is suggested for small growers, large growers, and FBGA. Several large marketers report that they do not want to incur the cost of adding the FFF logo to their clamshell labels for the short season. However, if enough of the blueberry industry has an interest in using FFF logos on their products and will join FFF as an industry, FFF will cover the cost of the labels for participating growers through rebates for the marketers and growers. FFF also provides stickers of the logo that can be placed on top of the clamshell packaging to accompany existing labeling instead of printing it on the label. FFF could also offer closure stickers for clamshells that do not impose on the marketer label. Individual marketers or growers could request the labels from FFF by calling either an FBGA representative or FFF directly.

There is an opportunity to use the labels and stickers for just a few weeks at a time when blueberry volume is really heavy in order to move fruit out of the stores or to differentiate Florida berries in transitional periods. Increased labeling would help unify the industry and improve the ability to differentiate between Chilean, Georgia, and Florida berries. The labels would also increase overall consumer recognition of Florida blueberries which could lead to increased demand for Florida blueberries.

Industry and Grower Tactics

These tactics span a continuum of feasibility, from large marketers to FBGA to individual growers. Special attention must be paid to retailers, along with the consumers, to move larger volumes of berries and increase awareness of the Florida season.

Maintain a dedicated marketing group for FBGA. This group would be responsible for communicating with the FFF campaign and growers to coordinate all industry-specific marketing tactics. The group could be on-hand prior to and during the season to handle all media requests, email pushes, grower questions, etc. The possibility may exist to leverage the relationship with UF/IFAS to hire an intern for their class credit or industry experience. This would help to keep costs low and not require a member of the FBGA to take time away from his or her current position to run the marketing campaign.

Develop a platform for growers to communicate volume information. A

platform is currently in the works for the FBGA website that would allow willing growers to update predicted crop volumes throughout the season. This could be a valuable resource for growers and marketers that might ensure higher blueberry prices for a longer period of time. It could allow marketers and growers to be more informed about the current market volumes so that prices will not drop due to market misinformation. However, it may be difficult to get information from all growers and marketers, as this would add another step to their buying and selling process.

Retailer-targeted tactics

Retail incentive program. This is suggested for large growers and FBGA. The tactic entails buying ads in grocery store weekly advertisements and other retail

publications. The ads could be distributed through the print publications, but also through cell phone applications and email. The ads could feature blueberries, along with the FFF logo. The advertised items could be accompanied by a FFF sign in stores to increase consumer recognition.

This tactic is important because it reaches consumers before they plan their grocery lists and prepares them to look for the FFF logo before their shopping trip. The cost of a retail incentive campaign is \$5,000 per ad on average.

Retail communications. This tactic is suggested for small growers, large growers, and FBGA. The tactic involves purchasing advertising space in retail publications such as the Packer, Produce News, and Progressive Grocer. Growers of all sizes could advertise for individual farms, with special emphasis on the Florida season. Marketers could coordinate the retail advertising for their growers, under either the marketer label or the individual farm. FBGA could also advertise for the entire Florida industry.

Beyond buying advertising space, growers or marketing groups could also submit articles to retail publications that are similar to the customer publications, but with more emphasis on the seasonality and first domestic blueberry angle. The purpose could be to inform retailers of when to start looking for Florida blueberries to put in their store and of the unique attributed of Florida blueberries, such as freshness and sweetness.

Another segment of this tactic could be to establish a database of email addresses to use for email pushes to retailers. Growers and marketers could use the email list to inform retailers of any changes to supply during the Florida season.

Consumer-targeted tactics

End-consumer communications. This tactic is suggested for large growers and FBGA. This tactic involves purchasing advertisements in magazines such as Florida Food and Wine, Southern Living, Garden and Gun, Better Homes and Gardens, Family Circle, Florida Trend, Parents, Coastal Living, Taste of the South, Southern Lady, and Food Network. Local publications, such as magazines and newspapers close to the grower's location, may also be effective targets. The advertisements would serve to advertise either the Florida industry as a whole or individual farms, but could include more information about Florida's growing season.

Beyond paid advertisements, large growers and FBGA could request articles to be written about Florida blueberries. The articles could include recipes, information about the unique growing season, information about the health benefits, or a feature on a Florida blueberry farmer. In order to incentivize the magazines to accept the articles, guest writers, including chefs and health professionals, could write the submissions. This would ease the burden of writing the articles for the magazines.

The publications would have to be planned out early in advance and it may be difficult to gauge how the season volumes will unfold early enough for the publication deadlines. Cost is also a consideration for this tactic, as each publication requires an advertising fee.

Industry social media pages. This tactic is suggested for FBGA. The first objective of this tactic is to promote the Blueberries from Florida social media accounts on the Blueberries from Florida website. The existing links are very difficult to locate at their current location on the website. Links to the social media sites need to be prominently displayed on the Blueberries from Florida website for consumers who land

there before locating the social media sites. Links to social media could also be added to the "Blueberry Fans" tab on the FBGA website.

All blueberry-related social media sites could reiterate information about the Florida blueberry season prior to and during the season and display this information prominently. FBGA could provide all infographics and information that is posted on the Blueberries from Florida social media sites to growers. Growers could post the infographics and industry information in order to reach more people.

The PIE Center has created an outreach video to communicate the Florida season to consumers. FBGA could post this pre-made video on all social media leading up to the Florida blueberry season to inform consumers about when to look for Florida blueberries. The video can be accessed at https://youtu.be/K3bCwb8Nrmk.

Maintained presence by FBGA on social media sites allows for engagement with consumers and can reach large groups of consumers with less cost than traditional advertising. However, this tactic requires someone to plan and monitor all content that would need to be posted and to schedule all posts.

Individual grower social media pages. This tactic is suggested for small and large growers. Social media pages create opportunities to engage with consumers year round. A Facebook business page could be created for users to "like" the business and receive updates on crop volumes and blueberry availability as followers of the grower's page.

Instagram is another resource available to growers. The purpose of the Instagram posts would be to connect consumers to the farms that their blueberries come from. Posts could include recipes, countdowns to the season, contests, daily

pictures during harvest, grower spotlights to give more insight to the industry and U-pick information. Contests on both Facebook and Instagram could include recipes, first pick of the season selfies, blueberries on the beach pictures, creative "brewberry" pairings with beer, among others.

The PIE Center has created an outreach video to communicate the Florida season to consumers. Growers could use the pre-made video leading up to the Florida blueberry season on their social media platforms to inform consumers about when to look for Florida blueberries.

Industry spokesperson. This tactic is suggested for FBGA and would involve engaging a personality to be the "face" of Florida blueberries. The spokesperson could be a grower, doctor, nutritionist, or an animated character, similar to the Aunty Oxidant character for the Florida Blueberry Festival. The purpose of the spokesperson would be to serve as a personal connection for consumers to the industry. The main role for the spokesperson would be to give health benefit information and recipes at events and appear on social media posts. The PIE Center has developed a brochure that the spokesperson could use to share health benefit information, which is located at http://www.piecenter.com/wp-content/uploads/2015/09/blueberry-flyer1.pdf. Also, depending on who is chosen as the spokesperson, he or she could appear exclusively as an animated character on marketing materials targeted at children.

The industry spokesperson's persona could also encompass an industry slogan. For example, the United States Highbush Blueberry Council calls blueberries "little blue dynamos". A Florida-specific slogan could be a great way to differentiate Florida blueberries, by reinforcing them as the first domestic blueberry of the season. Costs for

this tactic could be kept low by recruiting UF/IFAS students to create a creative character or slogan for the industry.

Email pushes. This tactic is suggested for small growers, large growers, and FBGA. The first step of the tactic could be to establish a database for FBGA of loyal consumers through login information at BlueberriesfromFlorida.com or Blueberries from Florida social media sites. Individual growers could use their social media platforms or U-pick registries to establish their email databases. Growers and FBGA could capture the email addresses by offering a sign-up section on all websites and social media to inform visitors of when to get the freshest blueberries from Florida.

The next step of this tactic would involve emailing consumers on the FBGA list when the first big volume amount of blueberries comes into retail stores. Individual growers could email loyal consumers on their email lists when their harvests go to market and encourage them to look for their blueberries in stores. Following the initial email blast, FBGA and growers could send out messages every week while blueberries are still in season as reminders for people to buy blueberries for special occasions or to include blueberries from Florida on their weekly shopping lists.

Another audience for email blasts could be retailers. If FBGA or large marketing groups could establish a reliable database of retail produce buyer emails, the volume information could be relayed to them through email blasts. This could help remedy some of the misinformation that occurs between retailers and the industry and would allow retailers to regain confidence in buying Florida blueberries.

This tactic requires communication between marketers to know when the first big volumes move to stores to make sure the blueberries are available when people search

for them. The email messages could be modified to react to anticipated volume fluctuations during the season. It also requires growers and marketers to utilize the volume reporting service through FBGA to give accurate information to consumers and retailers.

Earned media opportunities. This tactic is suggested for large growers and FBGA. Earned media involves creating news-worthy promotional pieces for large media channels and newspapers that are accompanied by blueberry goodie-baskets for editors as extra incentives to include the story at no cost to the industry. The news-worthy pieces could include news releases promoting the first domestic blueberry entering the market from Florida, video segments promoting blueberry health benefits and new research that feature the industry spokesperson, or promotional pieces that encourage consumers to buy Florida blueberries when they come into season.

Earned media is a worthwhile marketing tactic because the coverage is not paid for by the industry beyond a blueberry incentive. It is also a great way to gain coverage for the Florida blueberry industry from small and large media outlets and newspapers that have large reaches in their communities.

Agritourism. This tactic is suggested for small growers, large growers, and FBGA. Florida has a growing agritourism industry that appeals to both Florida residents and visitors to the state. According to the Florida Agritourism Association, additional to laws regarding the Florida agritourism industry in 2013 resulted in less regulations and more legal protection for Florida agritourism businesses. Therefore, less legal liability now exists on risks associated with the agritourism operation if there is signage posted on the land.

A grower-run U-Pick is one agritourism opportunity available to the industry. The Visit Florida Farms website currently has four growers displayed on the website when searching for "blueberries" specifically. More growers could add their farms to this site if they are Florida Agritourism Association members. The Blueberries from Florida website has several U-picks listed, but the opportunity exists to add more growers. Upick operations could be promoted further on Blueberries from Florida and grower social media accounts throughout the season. Individual U-picks could also partner with local schools for farm tour field trips. Visit Florida and the Florida Agritourism Association have also established a full resource toolkit to aid in the development of agritourism efforts at individual farms.

Another agritourism opportunity for the Florida blueberry industry could be to develop an interactive map of blueberry experiences, other than U-pick operations, such as places where people can find fresh blueberry pies, blueberry wine, blueberry cocktails, etc. The map could be located on the Florida Agritourism Association website or the Blueberries from Florida website along with the existing U-pick tab. Growers could promote the blueberry interactive map further through industry social media.

Agritourism is a marketing tactic that should be considered by all members of the industry because it increases the chance that consumers will have experiences with blueberries that may lead to more demand for Florida blueberries. Agritourism also provides more opportunities for growers of all sizes to promote their operations. However, it requires that growers be willing to have visitors at their operations and to learn about and comply with the safety standards set for agribusiness operations.

Restaurant partnerships. This tactic is suggested for large growers and FBGA. Working alongside chefs at restaurants, growers or FGBA representatives could help to develop blueberry recipes and drinks to be served on special menus in Florida restaurants or bakeries. The Florida blueberry item could be the main attraction on the menu sheet and could feature the FFF logo.

FBGA or the participating growers could offer incentives to the restaurants by promoting their businesses on the social media and websites. The partnerships could be promoted further by paying bloggers to write about Florida blueberry offerings around the state. The restaurants and their special menus could also be promoted through willing hotels and local businesses in the area. This would encourage tourists to try the special offerings during the season, which includes some school spring breaks and Easter. It would also target the "locavore" tourist by promoting local produce available in local restaurants.

Restaurant partnerships could be difficult to achieve because of unpredictable volumes and the short season. However, they would allow consumers see blueberries used in new recipes and may reach consumers that may not be exposed to blueberries in other settings.

Establish a presence at health events. This tactic is suggested for FBGA. Running groups hold large racing events from March through May and many community events are common during the spring months in Florida. FBGA could purchase a booth at these events to reach consumers with seasonality and health benefit information. The outreach materials created through the PIE Center could be used as the starting materials for promoting at these events. The outreach at these events could be

increased by incorporating a social media contests to promote the growing season. The contests could also include blueberry recipes, taking a picture with Florida blueberries in an impressive location and using a hashtag to enter, or showing how blueberries power workouts or healthy choices. The contestants' friends would see the posts and become aware that Florida blueberries are in season and hopefully be encouraged to go buy them.

FBGA could also target senior citizens with health benefit information at senior centers by connecting with community outreach coordinators. Senior citizens may not have as much access to social media or the Internet as younger consumers, so going to them with the pertinent information may be helpful. Senior citizens could benefit from most of the health benefits that blueberries provide and may be inclined to seek them out on grocery trips if they are made aware.

Share Fresh from Florida recipes. This tactic is suggested for small growers, large growers, and FBGA. When FFF posts recipes, FBGA and individual growers could share the recipes further on their websites and social media pages, increasing the number of people that see the recipe. This tactic could increase traffic to the FBGA website and individual grower sites and strengthen the bond between FBGA, individual growers, and FFF from the views of consumers.

Description of Dissemination

The Strategic Marketing Plan for the Florida Blueberry Industry was disseminated through several platforms and was evaluated by recipients throughout the dissemination process. The first dissemination step was to inform extension agents of the marketing plan findings and suggested tactics. A webinar was held on October 4, 2016 and nine extension agents attended. The webinar recording was made available online for

extension agents and interested parties to access at later dates. The webinar consisted of a brief explanation of research findings and a discussion of the suggested marketing tactics for the Florida blueberry industry. The goal of the webinar was to inform extension agents of all pertinent information about the marketing plan in order for them to aid blueberry growers and marketers in implementing the marketing tactics for the 2017 season. In a post-webinar survey of the extension agents, the majority of agents felt extremely comfortable or somewhat comfortable assisting growers in implementing each of the suggested marketing tactics. Five extension agents wanted more information on implementing restaurant partnerships and three agents desired more information on starting a retail communication campaign, but all felt confident in their understanding of the other suggested marketing tactics. All nine of the extension agents were extremely likely or somewhat likely to recommend the Strategic Marketing Plan for the Florida Blueberry Industry to growers and marketers in their respective counties.

Following the extension agent webinar, the Strategic Marketing Plan for the Florida Blueberry Industry was presented at the Florida Blueberry Growers Association (FBGA) Fall Meeting and Tradeshow on November 29, 2016. At the Spring 2016 FBGA meeting, a full presentation of the blueberry consumer research findings was given. For this reason, the November 2016 presentation of the marketing plan offered a brief overview of the consumer research findings, but focused most on explaining the suggested tactics for the blueberry industry. Each event attendee was provided with a printed copy of the marketing plan, a USB containing the PIE Center seasonality video, and 15 blueberry health benefit handouts in order to ease the implementation of some of the suggested marketing tactics for growers and marketers.

Forty post-presentation survey responses were received from the November 2016 FBGA meeting, resulting in a response rate of 38%. Some blueberry farms and marketing groups had several individuals attending the meeting presentations, so the post survey was completed by one representative of each willing farm or marketing group. At the time of the meeting, more than half of the respondents had no dedicated marketing budget. More than 60% of respondents plan to implement social media in their marketing campaigns following the information received in the marketing plan. Forty percent of respondents plan to implement some form of Fresh from Florida labeling and the same amount plan to implement some form of agritourism as a result of the information garnered from the marketing plan. The main reason respondents gave for planning to implement the suggested marketing plan tactics is that they are perceived to be low-cost options.

An abridged version of the marketing tactics was developed for dissemination through Blueberry News Magazine. An insert was added to the magazines with an outline of each marketing topic. Blueberry New Magazine is distributed to all members of FBGA and other industry professionals through trade shows and email lists. Prior to the dissemination of the marketing plan, Florida Grower Magazine, a segment of Growing Produce Magazine, reported on the consumer perceptions of Florida blueberries from the PIE Center consumer study. The report included information for readers about the forthcoming marketing plan for the blueberry industry and provided tools for readers to access the marketing plan when it became available.

The Strategic Marketing Plan for the Florida Blueberry Industry, all pertinent research reports, and the blueberry health benefits handout were made available on the

PIE Center website for all interested growers and marketers to view and download following the FBGA meeting.

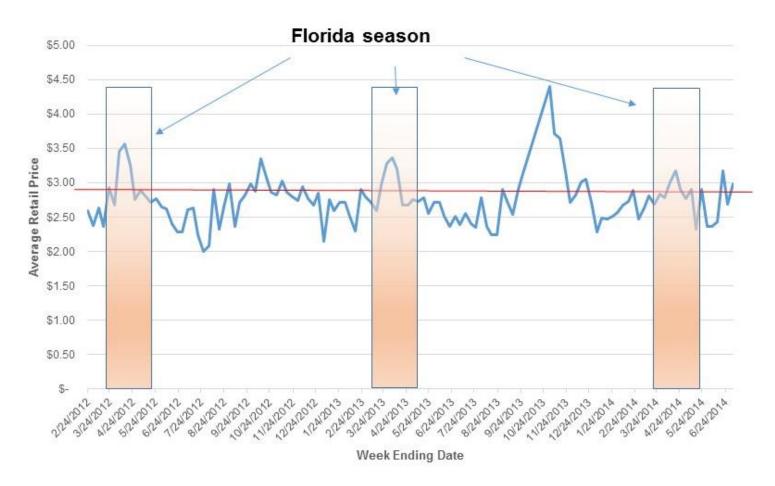


Figure 4-1. U.S. average retail price for non-organic blueberries – 6 oz. cups. Obtained from U.S. Department of Agriculture, Agricultural Marketing Service. Various years. Market News-Peaches and Blueberries. Washington DC. https://www.ams.usda.gov/market-news/fruits-vegetables.

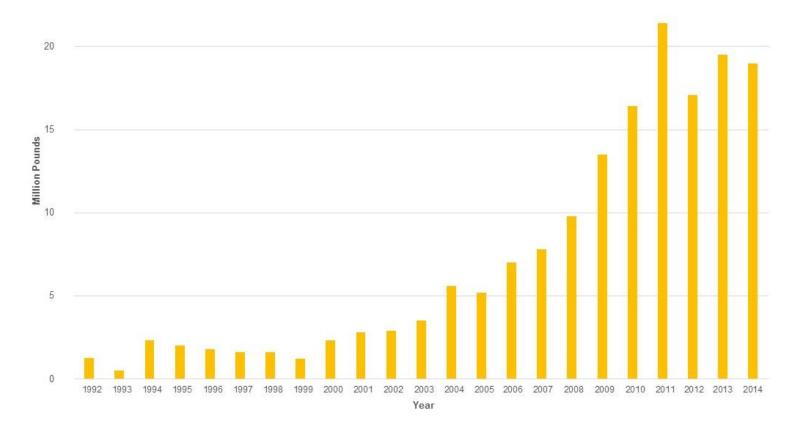


Figure 4-2. Florida's fresh blueberry utilized production. Obtained from USDA 2015b. Noncitrus Fruits and Nuts 2014 Summary. Washington DC. Available at: http://usda.mannlib.cornell.edu/usda/nass/NoncFruiNu/2010s/2015/NoncFruiNu-07-17-2015.pdf.; USDA 2013. U.S. Blueberry Industry. Washington DC. Available at:

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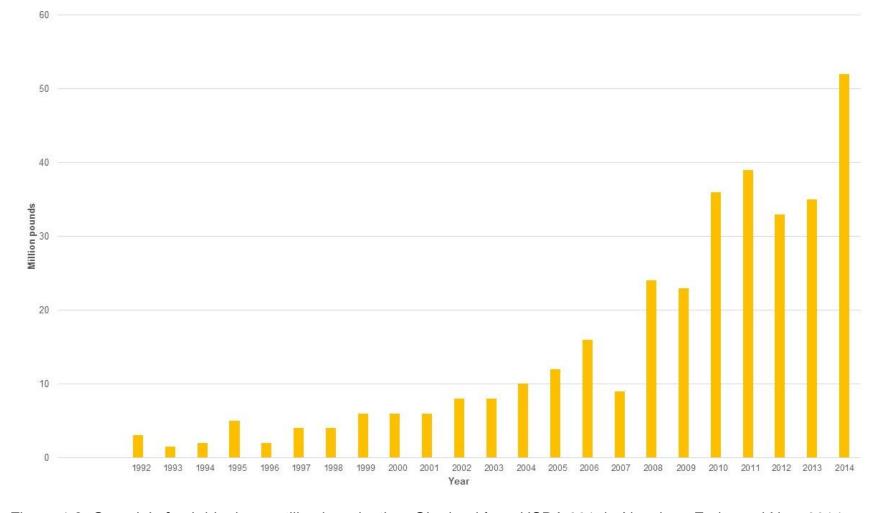


Figure 4-3. Georgia's fresh blueberry utilized production. Obtained from USDA 2015b. Noncitrus Fruits and Nuts 2014 Summary. Washington DC. Available at: http://usda.mannlib.cornell.edu/usda/nass/NoncFruiNu/2010s/2015/NoncFruiNu-07-17-2015.pdf.; USDA 2013. U.S. Blueberry Industry. Washington DC. Available at: http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1765.

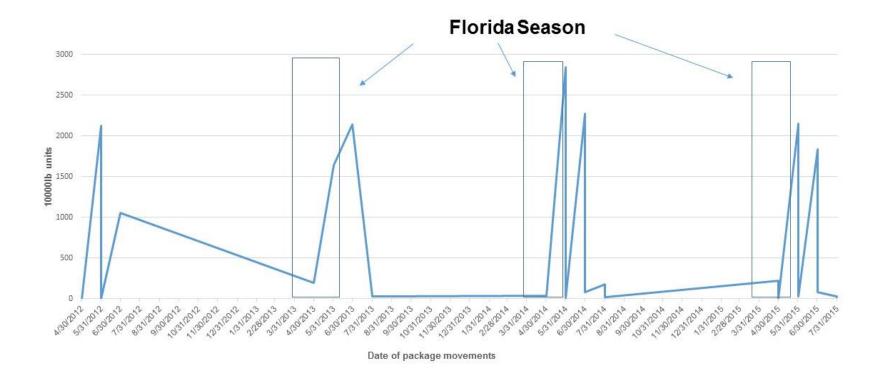


Figure 4-4. Movement of one flat of one-pint packages from Georgia. Obtained from U.S. Department of Agriculture, Agricultural Marketing Service. Various years. Market News-Peaches and Blueberries. Washington DC. https://www.ams.usda.gov/market-news/fruits-vegetables.

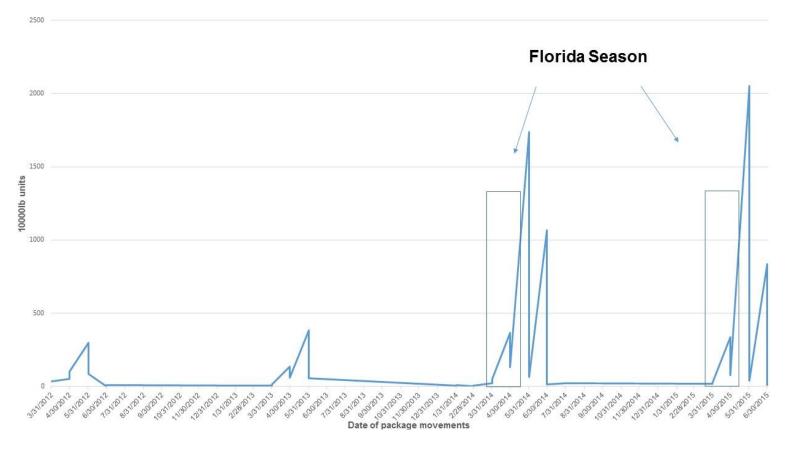


Figure 4-5. Movement of one flat of six-ounce cups with lids from California. Obtained from U.S. Department of Agriculture, Agricultural Marketing Service. Various years. Market News-Peaches and Blueberries. Washington DC. https://www.ams.usda.gov/market-news/fruits-vegetables.

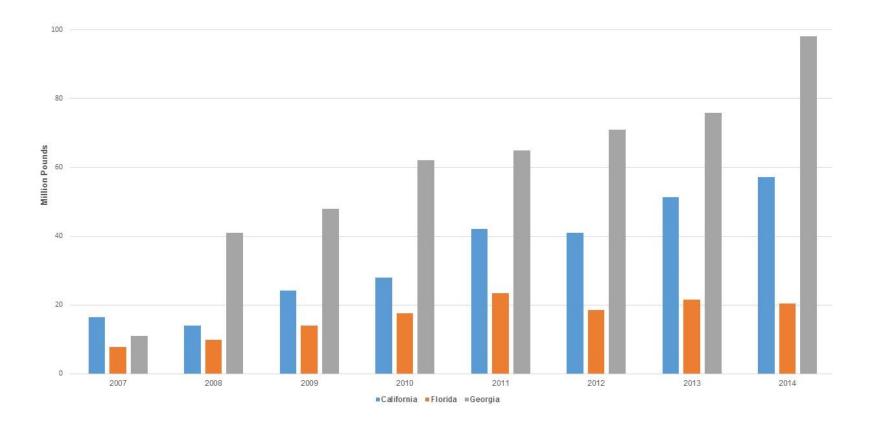


Figure 4-6. Production of blueberries by state. Obtained from USDA 2015b. *Noncitrus Fruits and Nuts 2014 Summary*. Washington DC. Available at: http://usda.mannlib.cornell.edu/usda/nass/NoncFruiNu/2010s/2015/NoncFruiNu-07-17-2015.pdf.; USDA 2013. *U.S. Blueberry Industry*. Washington DC. Available at: http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1765.

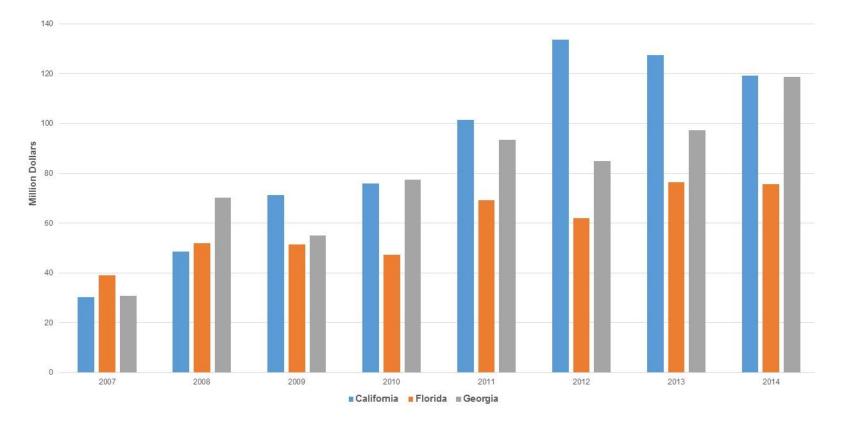


Figure 4-7. Production value (farm gate value) of blueberries by state. Obtained from USDA 2015b. Noncitrus Fruits and Nuts 2014 Summary. Washington DC. Available at: http://usda.mannlib.cornell.edu/usda/nass/NoncFruiNu/2010s/2015/NoncFruiNu-07-17-2015.pdf.; USDA 2013. U.S. Blueberry Industry. Washington DC. Available at:

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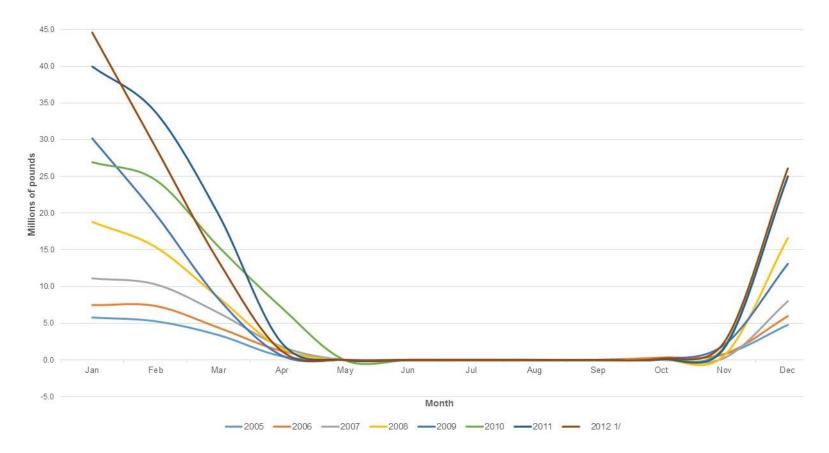


Figure 4-8. U.S. import amounts of Chilean blueberries by month. Obtained from U.S. Department of Agriculture. 2013. U.S. Blueberry Industry. Washington DC. Available at: http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1765.

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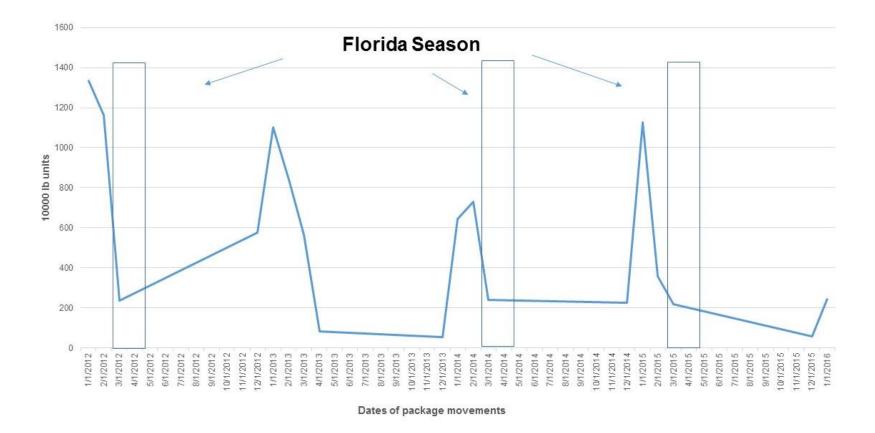


Figure 4-9. Chilean movement of blueberries into all U.S. ports in one-pint packs. Obtained from U.S. Department of Agriculture, Agricultural Marketing Service. Various years. Market News-Peaches and Blueberries. Washington DC. https://www.ams.usda.gov/market-news/fruits-vegetables.

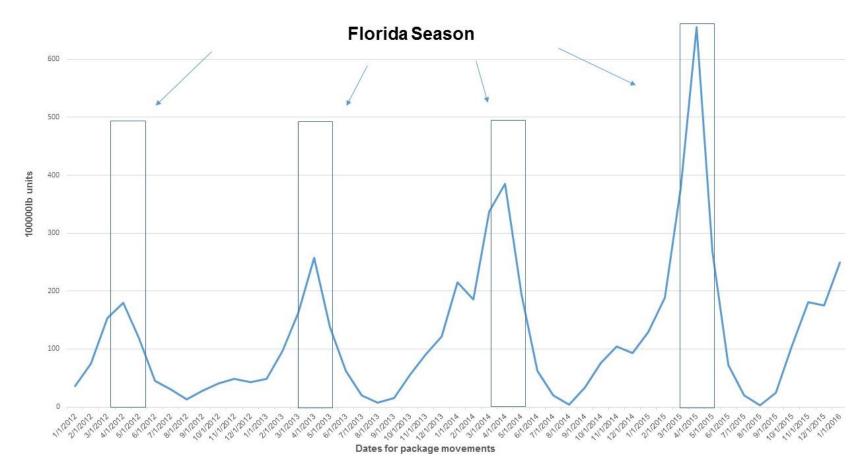


Figure 4-10. Imports of Mexican blueberries into the U.S. Obtained from U.S. Department of Agriculture, Agricultural Marketing Service. Various years. Market News-Peaches and Blueberries. Washington DC. https://www.ams.usda.gov/market-news/fruits-vegetables.

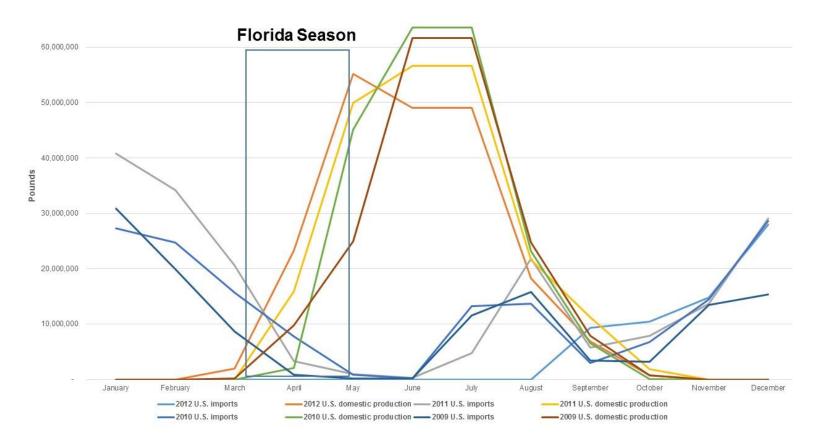


Figure 4-11. Overlay of U.S. domestic blueberry production and US blueberry imports. Obtained from U.S. Department of Agriculture. 2013. U.S. Blueberry Industry. Washington DC. Available at: http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=17

CHAPTER 5 PEACH CASE STUDY

Peaches are grown commercially in 23 states with California, South Carolina, and Georgia as the top three producers, respectively (Brunke and Chan 2015). In 2015, the United States utilized production of peaches totaled 1,650.8 million pounds, with 715.5 million pounds entering the fresh market (USDA 2016). Florida recently joined the southeastern states in peach production following the introduction of varieties that can grow in the state's unique climate. The Florida peach industry is young compared to many other peach industries in other states and there is not much data currently available on production and acreage.

The Florida peach industry affords unique opportunities and challenges to growers in the state. Low-chill varieties allow for peaches to be harvested in Florida before any other state can enter the U.S. commercial peach market, allowing a unique market window from early April through late May (Olmstead et al. 2014). Florida's peach varieties are highly susceptible to the state's variable weather patterns and require significant amounts of care throughout the growing and harvest seasons (Olmstead et al. 2014). According to interviews with Florida peach growers and marketers, Florida peaches are picked tree-ripe and are described as being sweeter than other peaches, but they are smaller by a quarter of an inch than other commercial peaches. The Florida peach's small size and unique marketing window present challenges to the marketing of Florida peaches and this document explores several marketing options for the Florida peach industry.

For the purposes of the marketing plan in this case study, the term "marketer" refers to the marketing groups that buy and sell peaches for contracted growers. These

entities may also engage in promotional campaigns for the both the growers and the whole marketing group. These campaigns include social media outreach, media promotions, and all other communications tasks. The term "direct marketing" refers to individual growers selling their own peaches through farmers markets, Community Supported Agriculture programs, U-pick operations, or direct sales to retailers or wholesalers. In-depth interviews with peach marketers and growers informed some of the research in this document. This is noted where appropriate.

Situational Analysis

The industry

This section summarizes in-depth interviews conducted with several Florida peach growers and marketers from August to November 2016.

Growers of Florida peaches indicate that there are mitigating factors that make growing peaches in Florida more difficult and more expensive than growing peaches in other areas. Weather fluctuations that cause harvest inconsistencies, either in crop volume or peach size, have discouraged growers from increasing peach acreage. In some cases, this has caused growers to discontinue growing peaches all together. One grower explained that more conservative growers refuse to expand peach acreage because they cannot guarantee a return on the investment. Another industry member believes that peach acreage may increase at some point in Florida, but it will only be by growers who have successfully grown and marketed peaches for a few consistent years. Grower uncertainty of the future of the Florida peach industry was a main theme throughout all grower and marketer interviews.

A main cause of this grower uncertainty is that Florida's unpredictable weather patterns during the growing season make it difficult for growers to predict crop volumes.

Accurate crop predictions are needed to be able to arrange pre-sale agreements with retailers that ensure a successful crop will have a channel in which to be marketed. Growers also cannot guarantee that fruit size will meet the retailer expectations before harvest because they cannot ensure peach trees will receive the optimal amount of chill hours needed to reach the maximum sizes. These uncertainties make it extremely difficult for growers to predict their profits each season.

Another issue that growers face is the actual growing and harvesting of the fruit. In order to produce peaches that are large enough for retailers to accept, peach trees must be pruned several times throughout the growing season. This is expensive for growers because they either must train a labor crew to do the pruning correctly and pay them to prune several times, or do the pruning themselves, taking time away from other growing activities. Additionally, Florida peaches are hand harvested by labor crews, but do not have a consistent bloom period. Harvest crews must be on-hand for several weeks to pick Florida peaches at the correct intervals, which most growers agree is a very expensive barrier to growing peaches. Growers also agree that the expensive nature of growing peaches makes it necessary for Florida peaches to be priced higher than peaches grown in other areas.

Retailers and marketers play pivotal roles in the Florida peach industry. Retail buyers set the size requirements that Florida peaches must meet in order to be sold in retail stores. Florida peaches are smaller than peaches grown in other states by nature and this is often a point of contention between marketers, growers, and retailers. The small Florida peach size is countered by a sweeter taste and a less messy eating experience for the consumer. However, most retailers will not currently accept a peach

to sell in stores that is smaller than two-and-three-eighths inches, no matter the other peach qualities. Growers who do not meet the size requirement must look for other avenues to market their crops. This presents an exciting opportunity for growers and marketers to identify other markets for selling smaller peaches. It may also present the opportunity to alter the negative perception retailers have of small peaches by educating them on the benefits of the smaller Florida peach.

Florida peaches are also unique because of the delicate handling needed from harvest until they are displayed for consumers. Several growers indicate that retailers need to be better educated on the correct handling of Florida peaches in order to preserve the tree-ripe quality. Peaches must be cooled until they are offered in stores and should also be displayed in small quantities to avoid bruising. Educating retailers on the correct handling practices may increase the amount of time Florida peaches can stay on display in retail stores.

The marketing of Florida peaches to large retailers is done by a few large players that represent the majority of the peach acreage in the state. These marketing groups primarily serve other specialty crops, but began marketing peaches as acreage began to expand. Growers that do not market under these large players generally direct their harvest to independent retailers, farmers markets, and U-pick operations. Partnerships with large retailers are the result of long-standing relationships that were often formed before the Florida peach industry was large enough to have a presence in retail stores. It was indicated that entering the large retail stores is difficult without an existing relationship with a buyer. The players that are able to enter the large retail stores can do so because they offer a large and reliable supply of peaches due to the coordination of

several growers' crops. A few Florida growers have enough individual acreage to market to large retailers independently, but this is not a possibility for the majority of individual growers. Most individual growers have five-to-ten acres of peaches which cannot produce the volume needed to enter a retail market unaided.

The unique market structure of the Florida peach industry has resulted in Florida growers dismissing the need for a peach growers' association. Several specialty crops in Florida have associations that act as a uniting force for the industries. The associations serve to educate growers and help all members of the respective industries connect. For Florida peaches, large marketing groups that represent the majority of the peach acreage in the state currently act as growers' associations for their contracted growers. The existence of these groups has led to most industry leaders being averse to taking charge of or participating in an industry-wide association. Growers that are not contracted under a large marketer do not have as great a chance to be connected with other growers through the marketing associations.

A marketing order was brought forth in 2015 that would have designated an acceptable size for Florida peaches going to market and would have provided funds to help the Florida peach industry with marketing efforts. It was rejected due to peach grower concerns about being under too much government oversight and not being able to sell undersized peaches in a bad weather year. Growers were also concerned about how the members of the committee that would represent the industry would be chosen. The failure of the marketing order indicates that peach growers are reluctant to trust suggestions from government agencies and are concerned about the fate of their crops if something unexpected occurs. Connecting all peach growers to share advice, educate

each other about growing practices, and allow for a platform to communicate about industry issues may help to advance the entire Florida peach industry. Considering the challenges that the Florida peach industry faces, an industry-wide association may be a key to ensuring long-term success.

The consumers

The following findings are summarized from the Consumer Peach Purchasing Survey report generated by Harders et al. (2016). The report is based on responses to a nationwide, online survey of 2,061 peach consumers conducted in July 2016. The majority of respondents to the consumer survey were white, non-Hispanic women, aged 50 years and older. The respondents were first asked to indicate if they had purchased peaches in the last year. For the purposes of this section, 1,020 respondents that had purchased peaches in the last year are referred to as "purchasers" and 522 respondents that had not purchased peaches in the last year are referred to as "nonpurchasers". An additional 519 responses were recorded from Florida peach purchasers.

Non-purchasers indicate that preferring other fruits, price, quality, and availability of fresh peaches are the top reasons why they do not purchase peaches. When nonpurchasers choose to eat peaches, they tend to eat them whole, as an ingredient for a dish, or as a snack. Non-purchasers that indicate they had eaten peaches in the last year very rarely pack peaches as an item in a school lunch. If non-purchasers were to buy peaches, the majority would prefer to do so by self-selection, by the pound, as opposed to buying a pre-packaged box. Non-purchasers agree that peaches are delicious and nutritious, but do not agree that peaches are an important part of their diet or that they are available year-round.

Most peach purchasers indicate that they buy peaches at least two-to-three times per month when peaches are assumed to be "in season" and less than once a month when peaches are presumed to be "out of season". Purchasers buy peaches because they are in season, are on sale, and catch the buyers eye at the store. Purchasers are less likely to buy peaches at any given time because of limited availability and a high price. A strong majority of purchasers buy peaches from supermarkets, with retail stores (e.g. Target) and farmers markets being viable alternatives. Purchasers prefer to buy peaches from supermarkets because of the perception of the availability of peaches, affordable price, and high quality that supermarkets provide. Retail stores were chosen as a secondary shopping location for the same qualities as supermarkets. Purchasers choose to buy from farmers markets because of the perception that the peaches are locally grown and are high quality. Most peach purchasers indicate that they never pack peaches as part of a school lunch or in addition to a drink or smoothie. Purchasers most often eat peaches whole, with the peel on, or as a snack. Purchasers indicate that flavor, freshness, smell and color are most important when using physical attributes to make a peach purchasing decision. Purchasers are mostly concerned with peaches being grown in the U.S.A and that peaches are all natural. Peaches being locally grown and pesticide free are also important purchasing factors. Similar to non-purchasers, purchasers prefer to self-select peaches by the pound over purchasing them in a prepackaged box. Purchasers agree that peaches are delicious, easy to find, and nutritious.

Purchasers of peaches have had more experiences with peach growing than non-purchasers. When considering experiences such as seeing a peach orchard in

person, handpicking peaches, growing peaches, and interacting with a peach grower, purchasers have had much more experience. Increasing experiences with peach growing may lead non-purchasers to become purchasers or may encourage current purchasers to buy more peaches. Marketing through agritourism is discussed further in the Tactics section of this document.

Purchasers and non-purchasers are aware that peaches are a source of fiber and that peaches are cholesterol free. Purchasers are more knowledgeable than nonpurchasers that peaches contain antioxidants. Both purchasers and non-purchasers are unsure if a peach contains less calories than an apple of the same size, if peaches help reduce hair loss, or if peaches can help prevent cancer. The findings from the health benefit knowledge questions indicate that there is an opportunity to increase consumer knowledge of peach health benefits through marketing. Informing consumers of the important health benefits that peaches provide may help to increase the consumer demand for peaches.

When considering the Florida peach industry and consumers, the Consumer Peach Purchasing Survey (Harders et al. 2016) reveals important information about nationwide consumer knowledge of Florida peach availability and seasonality. Unsurprisingly, purchasers and non-purchasers overwhelmingly associate Georgia with peach production. When Florida peach purchasers are separated from the national peach consumers, Georgia still is the state most associated with growing peaches. Purchasers and non-purchasers remarked in open-ended question opportunities that they did not know that Florida grows peaches and they associate Georgia as being the main peach growing state. Seasonal knowledge of Florida peaches is also very low for

both purchasers and non-purchasers. For non-purchasers, ten percent of the total respondents (n=51) indicated that they could correctly identify when Florida peaches are in season. When asked to actually identify the in-season months, less than half of the 51 respondents correctly answered that Florida peaches are available in April and May. Purchasers were asked about seasonality in the same way. Twenty-three percent of purchasers believed they could correctly identify the Florida season. Only 34% of purchasers could identify April and 57% could identify May as a Florida peach month.

Purchasers from Florida were then considered separately from the sample of all purchasers. Thirty-five percent of purchasers from Florida believed they could correctly identify the Florida peach season. Forty-two percent of this group correctly identified April and 69% correctly identified May as an in-season month for Florida peaches. Recognition of the Florida peach season is higher for Florida residents, but there is still room for improvement in consumer seasonal knowledge. This information indicates that an opportunity exists to increase consumer knowledge of the Florida peach industry through marketing. In order for consumer demand to exist for a product, consumers must be aware that the product exists. Consumers must also know when to be able to purchase the product, especially in the case of produce. Open-ended responses of both purchasers and non-purchasers revealed that, given the availability of Florida peaches in local areas, consumers are willing to buy Florida peaches.

Purchasers of peaches were also asked if they seek out Florida peaches specifically when shopping. The majority of purchasers report never or rarely doing so. Most purchasers from Florida report sometimes seeking out Florida peaches. Half of the purchasers indicated that they had tasted a Florida peach, while 43% of purchasers

indicated that they did not know if they had ever tasted a Florida peach. Most nonpurchasers (54%) did not know if they had ever tasted a Florida peach. These findings suggest that consumers are unsure of where peaches are grown and that they are not currently inclined to seek out Florida peaches.

Most non-purchasers (61%) and 37% of purchasers have never seen the Fresh from Florida logo on a display where they buy produce. The majority of purchasers from Florida (60%) had seen the Fresh from Florida logo on display. Despite low experiences with the Fresh from Florida logo, nationwide purchasers and non-purchasers associate the Fresh from Florida logo with positive qualities such as sweetness, nutrition, freshness, cleanliness, quality, and flavor. The majority of peach purchasers find the presence of the Fresh from Florida logo to be at least slightly important in purchasing decisions and are satisfied with the current use of the Fresh from Florida logo. Purchasers from Florida consider the Fresh from Florida logo to be very important in purchase decisions. A strong majority of purchasers (67%) prefer to buy peaches from Florida over other states because of the perceived freshness, flavor, and quality. Purchasers from Florida also prefer to buy peaches from Florida in order to support Florida's economy. The strong, positive association that purchasers have for the Fresh from Florida brand provides opportunities to market the Florida peach industry in conjunction with the already established state brand.

Respondents were then asked to indicate how they would like to learn more about Florida peaches. Purchasers and non-purchasers indicate wanting to sample a Florida peach, read a printed fact sheet, or visit a website. Both groups indicate they would also like to look at a display with the peach information or watch TV coverage.

For learning opportunities, neither group would want to attend a workshop or conference, connect with other consumers on social media, or do any volunteer work in the peach industry. Respondents' reported preferences for learning activities are taken into account in the marketing tactics section of this document in order to inform consumers of the existence of Florida peaches, the season for Florida peaches, and the health benefits that peaches provide.

Consumer Price Sensitivity

Nationwide, consumers indicate a strong preference to purchase peaches grown in Florida, even though consumers have little or no knowledge of the Florida peach season or that peaches are grown in Florida. In the 2016 PIE Center peach consumer survey, peach purchasers indicated a preference for Florida peaches based on their perceived freshness, flavor, and quality. In personal interviews with Florida peach growers and marketers, the need was expressed for Florida peaches to be priced higher than peaches grown in other regions due to the unique growing conditions in Florida. This section explores the hypothesis that consumers are willing to a premium for Florida peaches based on the perceived quality advantages of Florida peaches and the low availability of peaches during the Florida market window.

The analysis was conducted using methods of the Van Westendorp Price Sensitivity Model for 1,379 respondents. Respondents were asked to provide dollar amounts (per pound) at which they believe peaches would be too expensive they would not consider buying them (too expensive); so inexpensive that they would doubt the quality and would not consider buying them (too inexpensive); starting to get expensive where the purchase is not out of the question, but they would have to give some thought to buying them (expensive); and a bargain that is a great buy for the money

(inexpensive). Through analyzing the cumulative frequencies around the respondents' price preferences, the following results were found.

When consumers consider peaches grown in any state in the U.S., those that have not purchased peaches in the last year indicate that an acceptable price range for peaches is \$1.01 to \$2.56 per pound, with the optimal price of \$1.99 per pound (figure 5-1). Similarly, respondents that have purchased peaches from any U.S. state in the last year indicate an acceptable price range for peaches to be \$1.09 to \$2.99 per pound, with an optimal price of \$1.99 per pound (figure 5-2).

When asked about Florida peaches specifically, respondents provided similar price ranges and optimal prices to those given for peaches grown in other areas. For respondents who had not purchased peaches in the last year, the price range they would be willing to pay for Florida peaches is \$1.01 to \$2.78 per pound, with an optimal price of \$1.99 per pound (figure 5-3), which is close to the same as the range for the peaches grown in other areas. For respondents that had purchased peaches in the last year, the price range they would be willing to pay for Florida peaches that had purchased peaches in the last year, the price range they would be willing to pay for Florida peaches is \$1.05 to \$2.99 per pound, with an optimal price of \$2.05 per pound (figure 5-4), which is slightly higher than the optimal price of peaches grown in other areas.

The price ranges that respondents would be willing to pay for Florida peaches is not substantially higher for Florida peaches compared to peaches grown in other states, regardless of the respondents' reported desire to buy peaches from Florida. Figure 5-5 illustrates the price points for each group. While the optimal price given by purchasers for Florida peaches is slightly higher than the optimal price for peaches grown in other areas, it is important to note that for both purchasers and non-purchasers, the

indifference price point (IPP) for Florida peaches is \$1.99 per pound. At this point, the number of respondents that believe Florida peaches are expensive is equal to the number that believe Florida peaches are inexpensive (Weiner 2001). At any price higher than the IPP of \$1.99 per pound, the number of people that believe Florida peaches are expensive will be greater than the number of people who think Florida peaches are inexpensive and there will be the potential for profit loss (Weiner 2001). The optimal price for non-purchasers for Florida peaches is the same as the IPP, while the optimal price of Florida peaches for purchasers is only four cents greater than the IPP. The optimal price point is the price at which consumers would be most willing to buy the product (Weiner 2001). Growers and marketers of Florida peaches will have to make the decision of whether the potential loss of consumers and profits will be worth the potential monetary gains of pricing at the optimal price point if they decide to price peaches above the IPP of \$1.99 per pound. Growers and marketers may also have the chance to leverage the relationship with University of Florida researchers to discover how to make Florida peaches less expensive to grow and harvest, reducing the reliance of profits on consumers paying higher prices for Florida peaches.

Competitive Analysis

Florida produces freestone or semi-freestone peaches (Olmstead et al. 2016) to be sold to the fresh market. Similarly, Georgia and South Carolina produce freestone peaches almost primarily for the fresh market (USDA 2016b). California produces an abundance of peaches, both clingstone and freestone varieties, to be sold for both the fresh and the processed markets. Figure 5-6 gives a scope of the amount of U.S. utilized peach production going toward the fresh market versus the processed market.

This section details the top three peach-producing states and discusses their impacts on the Florida peach market.

Georgia

Touted as the Peach State, Georgia's utilized production of peaches totals more than 30,000 tons each year. Figure 5-7 illustrates that Georgia's production of peaches has remained fairly consistent since 2011. In 2015, Georgia accounted for four percent of all utilized peach production in the United States (USDA 2016b). When California's production dedicated to the processed market is disregarded, Georgia accounts for nine percent of all utilized peach production in the U.S. The Georgia peach marketing season begins in May and continues through August (Brunke and Chang 2015). Figure 5-8 shows that Georgia peaches begin entering the U.S. market in the first large-volume amount by the second week in May.

California

California is the top producer of peaches in the United States. In 2015, 73% of the utilized peach production in the United States was marketed from California (USDA 2016b). The peach marketing season in California for Freestone peaches runs from April 20 to October 10 (Brunke and Chang 2015). Personal interviews with growers and marketers of Florida peaches indicate that California's impingement on the Florida season in April and May is not of as much concern as peaches grown in southern states because of the amount of California peaches directed to the processed market, shown in figure 5-9. Some growers and marketers indicate that California's production directed to the fresh market could be a concern for the Florida peach industry depending on which the retailers that the grower or marketer sells to. Some retailers will reach out to California marketers in order to ensure a reliable source of peaches for an extended

period of time. However, there are some retailers that prefer peaches grown in southern areas before reaching out to California.

In 2015, 52% of the total U.S. utilized production was made up of peaches from California entering the processed market. California accounts for 42% of the U.S. total utilized production entering the fresh market, in which South Carolina, Georgia, and Florida also compete.

South Carolina

South Carolina regularly produces more peaches than Georgia, accounting for seven percent of U.S. peach utilized production in 2015 (USDA 2016b). When California's production dedicated to the processed market is disregarded, South Carolina accounts for 16% of all utilized peach production in the U.S. Figure 5-10 shows that South Carolina's utilized production of peaches has reached 59,000 tons or greater since 2009. The South Carolina peach season is reported as the same as Georgia's, from May to August (Brunke and Chang 2015). Figure 5-11 shows that South Carolina peaches enter the U.S. market heavily at the end of May and into June and July.

Implications

California, Georgia, and South Carolina supply the majority of all peaches to the U.S. peach market. While California produces many more peaches than South Carolina and Georgia, much of California's peach production is dedicated to the processed market, while South Carolina and Georgia provide more peaches to the fresh market (See California 2012). Because the majority of Florida peaches also go to the fresh market, production from South Carolina and Georgia poses more potential risks for the Florida peach industry than production from California.

Florida's season typically begins in late-March and ends by mid-May. An early crop from Georgia or South Carolina could mean large volumes of peaches entering the market before Florida growers are finished harvesting. This unexpected flooding of the market would lead to decreased prices for Florida peaches, a risk if profitability depends on receiving higher prices for early market production.

Florida peaches are also highly susceptible to weather fluctuations. While Florida peach varieties require fewer chill hours than peaches grown in other areas, they still require some chill hours to produce quality fruit. If the peaches do not receive these chill hours, as occurred in 2016, the harvest may be delayed or the crop may not produce at all (Aldrich 2016). If this occurs in all of the Southern states and each state is set back a few weeks, little harm may come to the Florida peach market. However, if South Carolina and Georgia peach varieties receive the required chill hours and Florida peaches do not, the late Florida crop may enter the market at the same time as South Carolina and Georgia. This increased supply and competition would also lead to lower prices for Florida growers.

Competition from other states with large production volumes, as well as the unreliability of weather, strengthens the argument for the need for a marketing plan for Florida peaches.

SWOT Analysis

Strengths

Exclusive marketing window. Florida offers the only peaches available in the U.S. from March through May. During this time, Florida peaches are fresher than Chilean peaches that may linger into mid-March. Additionally, Florida peach growers do not have to compete with other peach-producing states for six to eight weeks during this

window and retailers must look to Florida producers as the sole source of peaches from March through May.

Florida peach attributes. Florida peach varieties are different from peaches grown in other areas. The low-chill varieties that are available from the University of Florida allow peaches to be grown for harvest during the unique Florida marketing window. Florida peaches are believed to be sweeter than peaches from other states and the non-melting variety of Florida peaches allows for a cleaner eating experience. Florida peaches are also believed by growers to be more aromatic than peaches from other states when displayed in stores. Additionally, Florida peaches are tree-ripened, meaning that they are picked at the height of freshness and not ripened by any other artificial means.

Connection to University of Florida and Institute of Food and Agricultural Sciences (UF/IFAS). UF/IFAS provides support to Florida peach growers in the form of new varieties and market research. The infrastructure of UF/IFAS is designed so that growers are able to easily receive advice from researchers and extension agents about marketing and growing issues. This also enables growers to offer suggestions to UF/IFAS researchers about possible attributes for new peach varieties.

Existing connection with Fresh from Florida. Consumers indicate that the Fresh from Florida logo motivates them to buy a Florida product over a product grown in other areas. Fresh from Florida is familiar with the marketing challenges of the Florida peach industry and, at the time of this project, marketing efforts were in the works for the 2017 peach season through Fresh from Florida.

Weaknesses

No organized peach group exists. Peach growers either market their peaches on their own or through large marketing groups. The marketing groups and individual growers do not currently have an organized forum for communicating about industry issues. Once a marketing plan is established for the peach industry, there is no group in place to implement the plan and very little interest exists from growers and industry leaders to establish a peach association. The absence of an organized grower group makes securing funding for marketing efforts difficult because funds from FDACS must be allocated to an industry group. They cannot provide funds to assist in marketing or market research for individual marketing groups or growers.

Inconsistent Florida peach size. Florida peaches are smaller than peaches available from other states and retailers generally do not want to offer small peaches in stores. Retailer demand for larger peaches results in many Florida growers being unable to compete in the traditional retail market. Retailers are not aware of the benefits of a smaller peach to certain segments of the population.

Growers are also faced with inconsistent peach size. The size of peaches relies heavily on weather patterns and the pruning of trees during the growing season. This means that peach size is inconsistent between years and between individual trees. The inconsistency of peach size makes it difficult for growers to predict volumes for presales.

Inconsistent volume. Florida peach harvests are susceptible to volume fluctuations based on weather patterns. For example, an insufficient number of chill units during the peach growing season or a late freeze close to harvest can lead to low peach volumes. The inconsistency results in retailers not having a reliable prediction of

Florida peach volumes each year, which makes it difficult for growers and marketers to pre-sell peaches to any retailer or plan any marketing campaigns.

Access to retail stores. Large retail stores purchase peaches from only a few prominent peach marketing groups. The opportunities for selling Florida peaches in retail stores exist mainly due to long-standing connections with produce buyers at large retail chains. New or small growers that do not market peaches under a larger group do not have the connections needed to sell to large retail stores, which requires small growers to look for other outlets to market their peaches. This may not necessarily be a weakness of the peach industry, but is viewed as a barrier to entry for small growers.

Opportunities

Educate consumers. Consumers need to be made aware that peaches are grown in Florida and of the Florida peach season. According to PIE Center research, the majority of surveyed consumers report buying peaches at least two or three times per month when peaches are in season, but most report buying them in June, July and August when Florida peaches are not in season. Capturing consumer attention when Florida peaches are in season and prior to the season may lead to consumer anticipation of the Florida peach season and a greater demand for Florida peaches.

Consumers also need to be made aware of the attributes of Florida peaches. Florida peaches are smaller than other peaches and can be easily eaten as a snack, especially for children, which makes them an excellent option to be included in a work or school lunch. Florida peaches are picked tree-ripe, meaning they are picked at the optimum taste level and shipped immediately to ensure freshness. Florida peaches are also sweeter than peaches grown in other states and the non-melting varieties of

Florida peaches allow for a cleaner eating experience. The opportunity exists to educate consumers about these attributes through marketing.

Educate retailers. Retailers and retail produce employees need to be informed of the correct handling of Florida peaches to ensure a quality product for consumers. Informative materials could be included with peach shipments to help educate all produce employees on how to correctly handle and display Florida peaches. Retailers could also benefit from informative advertisements that would ensure produce buyers know the correct time to start looking to buy Florida peaches.

Educate growers. Growers and marketers need to communicate about the quality requirements set by retailers. Some growers assume that marketers should be able to sell all sizes of Florida peaches because they have not been properly informed of the expectations of size and quality set forth by retail produce buyers. Informing growers of these expectations provides the opportunity for growers to adjust their growing practices to ensure production of a quality size peach that will not be rejected by retailers.

Identify market channels for small peaches. Marketing channels exist for peaches that retailers would normally reject because of size including school lunch programs, nursing homes, and food banks. Often, growers can receive payment for food that would have been rejected by retailers through these channels. There may also be the opportunity to target parents and their children with the message that Florida peaches are the perfect size for a child's lunch and are a less messy option for a snack.

Produce show presence. Produce shows are high-profile forums where peach growers or industry representatives could demonstrate the value of Florida peaches to

retailers in the U.S. and throughout the world. A booth for Florida peaches could provide retailers the chance to learn about the unique Florida peach attributes through sampling opportunities. Informational materials could be provided to aid in increasing retailer knowledge of Florida peaches and their special handling considerations.

Taste test data. UF/IFAS has a program in place to collect taste test data. Collecting the data based on university-backed research could be used to substantiate claims to consumers and retailers that Florida peaches are sweeter than peaches grown in other states.

Identify and target consumers that are willing to pay a premium price.

National surveys of peach consumers indicate that consumers are not willing to pay a premium price for peaches grown in Florida. Retailers with a customer base that is already accustomed to paying a premium for produce or other grocery items might be able to fetch a higher price for Florida growers than traditional retail stores.

Motivate retailers to differentiate Florida peaches. Consumers indicate that they would like to purchase peaches grown in Florida, if available. The opportunity exists for growers or the Florida peach industry to assist retailers with differentiating Florida peaches in stores and in advertisements. Retailers may be motivated to differentiate Florida peaches as part of an incentive program in retail advertisements or through FFF or the industry providing signage to accompany Florida peaches in retail stores or farmers markets.

Consumer desire to purchase Florida products. The majority of peach purchasers, for both the national and Florida samples of the PIE Center consumer survey, indicated that they would like to buy peaches grown in Florida. Current peach

purchasers desire Florida peaches because they consider peaches from Florida to be fresh, flavorful, and of a high quality. The opportunity exists to develop targeted marketing messages that reinforce the positive consumer views of Florida peaches. Additionally, the industry could make the most out of the consumer desire to buy Florida peaches by developing tactics that allow consumers to find Florida peaches easily in retail stores and at farmers markets.

Threats

Low consumer knowledge. Consumers in the PIE Center consumer survey indicated that they generally do not know that peaches are grown in Florida. A lack of consumer knowledge about the existence of Florida peaches results in little or no consumer demand for Florida peaches. While Georgia is referred to as the Peach State, the Florida peach industry must find a way to break into the conversation about quality peach production.

Additional threats related to low consumer knowledge include the PIE Center findings that most consumers report purchasing peaches in summer months when Florida peaches are not available and that consumers are unaware of the differences between Florida peaches and peaches grown in other states. The Florida peach industry runs the risk of not meeting consumer expectations of peach flavor and texture if consumers are unaware of the unique Florida peach characteristics, such as firmness.

Low retailer knowledge. Retailers are unaware of the special care that needs to be taken when handling Florida peaches. Because some varieties of Florida peaches have softer flesh than peaches grown in other states and are susceptible to bruising, they cannot simply be dumped into a display case. Florida peaches must also be chilled

from the point of picking to the time they are displayed in stores because warm temperatures will cause the flesh of the peaches to decay quickly.

Growers have observed that produce buyers and employees at retail stores do not have best-handling practices with Florida peaches, which may be due to the lack of education from peach industry experts. Growers assure that ensuring best-handling practices throughout the peach marketing process results in higher quality fruit.

Increasing volumes from other states. Florida's peach production and harvest schedule is heavily dependent on weather patterns, which makes Florida's crop timing difficult to forecast. The perceived unreliability of Florida's peach availability results in retailers being timid in contracting Florida peaches each year.

However, California, Georgia, and South Carolina have experienced steadily increasing peach volumes each year and little variability in harvest schedules. Because of the high volumes and reliable output timing, retailers are able to buy more peaches at one time from these states than they can from Florida. This greater sense of reliability from other peach-producing states may be more attractive to retailers than taking a chance on Florida peaches.

Exit of Florida peach growers due to uncertainty. Florida peach growers have had a few years of extreme crop uncertainty due mainly to low-chill hours and late freezes that have decimated the peach crop. For this reason, many Florida peach growers are uncertain of the viability of growing peaches and some have threatened to leave the industry following any more unpredictable harvest seasons.

A decrease in Florida peach volumes would make implementing the tactics for marketing of Florida peaches as a cohesive industry even more challenging. Since a

few large groups control the majority of the peach volume and supply stream, small peach producers may not have an incentive to participate in industry-wide marketing efforts. Without the small Florida growers, an integral part of the industry would be missing from having a voice in marketing efforts or industry decisions.

Absence of premium price. The willingness-to-pay study for Florida peaches showed that consumers are not willing to pay more for Florida peaches than for peaches grown in other states. On average, consumers are willing to pay about \$2.00 per pound for peaches grown in any state. Peach growers in Florida have come to expect higher prices during the Florida season because of the exclusivity of the market window. However, with consumers not willing to pay a premium price for Florida peaches, Florida growers will have to adapt to receiving lower prices for peaches possibly by finding ways to lower production costs.

Damaged reputation of Florida peaches. Some Florida peach growers sold exceptionally small peaches to prominent retailers in past seasons. The group of growers attempted to sell as many of the peaches from their trees as possible, but did not prune their trees properly for a quality peach size. A lack of pruning often leads to a greater volume of peaches being harvested, but the individual peaches are often much smaller than the typical Florida peach. Some large retailers are still weary of buying Florida peaches following these incidents.

Changing personnel at UF. The main point of contact for peach growers is no longer employed at UF/IFAS. This person was the main driver for establishing a peach association and had developed a rapport with many Florida growers. The role had not been filled prior to the 2017 peach season and this case study. The next person who

enters this role must gain the trust of growers in order to help advance the industry and retain the industry's valuable relationship with UF/IFAS.

SWOT Implications

Competitive advantages exist for the Florida peach industry by utilizing the industry's strengths to capitalize on identified opportunities. Connections to the University of Florida and Fresh from Florida provide the Florida peach industry with valuable resources for marketing and research. The University of Florida can conduct consumer taste testing research to substantiate claims about Florida peach sweetness and quality differences from peaches grown in other states. University experts are available to growers for questions regarding marketing and growing of peaches. Fresh from Florida has the expertise and connections available to implement an effective marketing campaign for the peach industry, especially if an association is established to provide a platform for securing more funding.

Florida peach attributes offer a strong competitive advantage when combined with opportunities to educate consumers and retailers. The advantage is increased if retailers can differentiate Florida peaches from other peaches based on their unique attributes. Informing consumers and retailers that Florida peaches are sweeter than other peaches and are in season when no other peaches are available may lead to a strong demand that was not formerly realized. Additionally, once consumers and retailers have been educated on the distinguishing attributes of Florida peaches, marketing tactics will be in place to differentiate Florida peaches in retail stores and farmers markets. This allows consumers to satiate their demand for Florida peaches without being inhibited by imperfect information.

Florida's low-chill peach varieties provide a competitive advantage to the peach industry for all growers through the development of the unique peach marketing window. During this time, Florida growers compete only with other growers in the state for supplying peaches to retailers throughout the United States. Marketing efforts that promote the entire industry to retailers and consumers during this window will serve to strengthen this competitive advantage.

Where competitive advantages exist, so do competitive disadvantages. Many specialty crops in Florida and other states have established industry associations that help promote the respective industries for marketing purposes and ensuring a quality product from all growers in the state. Florida peaches do not have a grower or marketer association for the entire industry. This makes it difficult to secure funding for marketing assistance and research resources. As it is currently, individual growers or marketing groups must take the initiative to seek out assistance from Fresh from Florida or the University of Florida. This makes for a difficult situation when attempting to offer an industry-wide message to consumers and retailers. It also means there is no entity charged with promoting Florida peaches for the industry beyond Fresh from Florida.

Inconsistent harvest volumes and small peach sizes have led to retailer distrust of the Florida peach industry. Retailers are weary of purchasing Florida peaches because of past instances of poor crops being brought to market and will consider waiting to buy peaches from Georgia or South Carolina if the Florida peach crop looks late or light. The Florida peach industry must overcome this damaged reputation by educating retailers of the positive qualities of Florida peaches and by working to ensure quality fruit is entering the market each year. Some of the uncertainty surrounding the

peach crop is due to weather inconsistencies and the delicate process of growing peaches in Florida. Improved growing practices, such as attention to frost protection, or the development of more-hardy peach varieties may lessen some of the impact of weather on the Florida peach crop.

Target Markets

Consumers

The following marketing tactics seek to increase consumer awareness that peaches are grown in Florida and that the Florida peach season runs from early April through late May. Consumers should also be informed of the unique attributes of Florida peaches and of how peaches can be used in different ways than consumers already use them. The goal of the consumer messaging is to increase consumer recognition and knowledge of the Florida peach season, which may lead to increased demand for Florida peaches.

Retailers

Retailers need to be informed of the Florida peach season and of the unique attributes of Florida peaches. Retailers also benefit from receiving messages about the correct storage and handling of Florida peaches. The messaging targeting retailers also applies to independent grocers and other groups that sell Florida peaches.

Growers

Growers need to be informed of how to improve growing practices to compensate for consumers not being willing to pay premium prices for Florida peaches. Growers also need to be informed of retailer size and quality expectations in order to produce a crop that can be sold for the retail market.

Suggested Tactics

This section details potential marketing tactics for the Florida peach industry based on consumer, producer, and marketer research. Each tactic has nuances that must be addressed depending on the group implementing the tactic.

Establish a Florida peach marketing arm or dedicated association. This group of people exists to implement the peach marketing plan tactics. The focus of the marketing arm or association would be to promote Florida peaches as a unified industry, as opposed to individual grower associations promoting separately. This would ensure that all resources are being used effectively to increase consumer recognition of Florida peach availability and season. A dedicated association also increases the likelihood of receiving funding for research and marketing efforts through Fresh from Florida.

An alternative to establishing an organized association of growers is developing a strong brand for Florida peaches. Similar to the Cuties citrus branding, a Florida peach brand would take advantage of the smaller peach size and position the Florida peach as a snack or lunch item, causing consumers to rethink how they typically eat peaches.

Continued partnership with UF/IFAS. Growers should engage with UF/IFAS researchers to develop peach cultivars or peach production practices that are less expensive than current practices. A partnership with UF/IFAS is integral for finding solutions to the issue of consumers not being willing to pay a premium for Florida peaches. Part of the partnership with UF/IFAS is the possibility to offer internship credit to a UF student for coordinating marketing activities prior to and during the Florida peach marketing season. The UF/IFAS partnership could also be leveraged in utilizing

the taste testing facilities at UF to validate claims about Florida peach sweetness compared to the taste of peaches grown in other areas.

Reapply for FDACS grants. The Florida peach industry could work with UF/IFAS and other industry associations to secure another FDACS Specialty Crop Block Grant to begin in 2019. The funding from this grant could be used to establish a Florida peach informational website to better inform consumers of the Florida peach season.

Education through marketing. The main issue facing the Florida peach industry is a lack of knowledge and communication about the unique characteristics of the fruit. In order to educate retailers on Florida peach size advantages and crop timing, the following tactics are recommended.

Produce show attendance at large produce shows, such as PMA Fresh Summit, offer international market exposure for Florida peaches. Produce shows allow members of the peach industry to make connections with and inform the large produce market players about why Florida peaches are superior to other peaches. Additionally, retail communications allow the Florida peach industry to gain access to large retailers through advertising or editorial exposure. For this tactic, the industry could submit articles written by Florida peach industry experts to inform retailers about the Florida peach season and why Florida peaches are unique. Suggested retail communication outlets include The Packer, Progressive Grocer, and Produce News.

Retail information pieces are another way for the Florida peach industry to connect with produce retailers. Growers and marketers express a desire for an increase in retailer knowledge about the correct handling of Florida peaches. The industry could

include handouts with peach shipments intended for large retailers that detail the correct handling practices. It may be difficult to ensure the information reaches the correct members of the retail produce teams, but growers and marketers could encourage the buyers to share the information with all members of the retail team that display or handle Florida peaches. These informational pieces are also useful for personnel at other peach-selling outlets such as farmers markets, beyond large retail markets. The handling information could also be offered in the form of an article for retail communication outlets to reach produce buyers even further.

In order to educate growers on retailer expectations, industry leaders could encourage marketers to explain rejection criteria to each grower before the harvest season begins. Many marketers express that growers make the incorrect assumption that any peach that is produced should be able to be sold, regardless of the size. Increasing grower understanding of retailer expectations may encourage growers to use the best growing practices to ensure quality peach size.

Social media. Consumers indicate that they want to know more about Florida peach attributes and more about the Florida peach season. Social media that promotes the Florida peach industry could be in the form of grower accounts, marketing group accounts, or a peach growers association account, which does not currently exist. The goal of all social media posts through these accounts should be to inform consumers of the Florida peach season and the attributes of Florida peaches. Social media is also a very responsive way to inform consumers about crop timing and locations of Florida peach shipments, and is also a way to engage consumers in conversations about their

experiences with Florida peaches that other consumers will see. Social media is a powerful tool that could serve to reach a diverse group of potential peach buyers.

Utilize the consumer-preferred education tactics. Consumers indicate a desire to learn more about the Florida peach season and attributes of Florida peaches through several means. The first is through sampling opportunities. Fresh from Florida offers assistance with setting up sampling opportunities at retail stores. Allowing consumers the chance to try Florida peaches at the point of purchase offers the opportunity for more potential consumers to make an impulse purchase of peaches during their shopping trip. Sampling opportunities may also help to increase the number of people being exposed to Florida peaches and their unique attributes.

Consumers also report that they desire to learn more about Florida peaches by visiting informational websites. The Florida peach industry could develop a website dedicated to informing consumers of the Florida peach season and Florida peach attributes, as well as providing information regarding U-picks and farmers markets. The website could be promoted through individual grower and peach association social media accounts and could be managed either by the peach growers association or the UF/IFAS student intern.

Displays and printed fact sheets could be used to connect with consumers at community events. Representatives from the peach grower association marketing arm or the UF/IFAS student intern could set up a display at community events that include races, community spring festivals, famers markets, or even displays at retail stores. The event displays and fact sheets could offer information about the Florida season and Florida peach attributes, as well as health benefit information.

TV coverage is another consumer-preferred tactic for gaining knowledge about the Florida peach season. The peach industry could utilize earned media opportunities to secure coverage on local and national news channels. Earned media entails offering an incentive, such as a peach cobbler or peach wine gift, to media outlet editors and reporters in order to gain access to media outlets without paying for advertising. TV coverage could begin before the Florida season to increase recognition of the Florida season and continue until close to the end of the season to remind consumers to add Florida peaches to their shopping lists. Ideas for the TV segments include peach grower spotlights, fun and informational segments about peach health benefits and the Florida peach season, and U-pick information from local farms.

School lunch programs. The small size of the Florida peach makes it an ideal addition to children's lunches, which opens the opportunity for growers or marketing groups to sell peaches directly to school lunch programs. This option could be especially attractive in harvest years when there is an abundance of peaches that are too small for retail markets. The Fresh from Florida Farm-to-School program exists to connect produce growers with local school districts and the Florida peach industry could utilize this existing resource to ensure more peaches are sold each year.

Demonstrate unconventional ways to use peaches. Consumers in the PIE Center survey indicated that they mostly eat peaches whole and very few of them use peaches in lunches, smoothies, or as an ingredient in other dishes. A secondary messaging strategy, beyond communicating about the Florida peach season and availability, could include providing information for consumers about different ways to use Florida peaches in their diets. This messaging could be a part of a Rethink your

Peach campaign that could encourage consumers to include a snack-sized Florida peach in lunches, offer new recipes using peaches in smoothies, salads, drinks, and desserts, while continuing to reinforce the message that Florida grows sweet peaches. The campaign could be promoted through grower and industry social media sites and through TV coverage, displays and printed fact sheets at community events, and on the peach industry website.

Provide a marketing toolkit for growers with U-picks. Florida has a growing agritourism industry that appeals to both Florida residents and visitors to the state. According to the Florida Agritourism Association, additional to laws regarding the Florida agritourism industry in 2013 resulted in less regulations and more legal protection for Florida agritourism businesses. This means that less legal liability exists for risks associated with a U-pick operation if the correct steps are taken prior to operation. For this reason, Visit Florida and the Florida Agritourism Association established a full resource toolkit to aide in the development of agritourism efforts at individual farms.

U-picks are an important part of Florida agriculture because they provide the opportunity for consumers to have personal experiences with Florida crops, which may lead to higher demand for produce grown specifically in Florida. U-picks may also serve as a way to reinforce consumer knowledge of timing for the Florida produce seasons. In order to assist Florida peach growers in marketing their U-picks, the Florida peach association marketing arm or the UF/IFAS marketing intern could develop a marketing toolkit for growers to use as soon as they are able to open for U-pick operations. The toolkit would serve to ensure an easy transition from harvest operations to opening for

U-pick time. The toolkit could include pre-made social media posts announcing the opening of the U-pick, examples of farm signs that meet the standards set for U-pick operations, and any other information that growers would deem necessary to decrease the amount of time they would spend in marketing their U-picks.

Dissemination

Due to the lack of an organized peach growers association, the dissemination of the peach marketing plan was reliant on PIE Center resources and the cooperation of large market players. A PIE Center webinar was held for extension agents on March 23, 2017 to discuss the peach consumer research findings and the tactics that Fresh from Florida was implementing for the 2017 Florida peach season. The marketing plan was also shared with contacts in the peach industry in order to reach growers and marketers through the marketing group and industry networks. A handout was developed for the 2017 Fall edition of Peach Grower magazine that detailed the consumer research and provided resources for accessing the peach marketing plan through the PIE Center website.

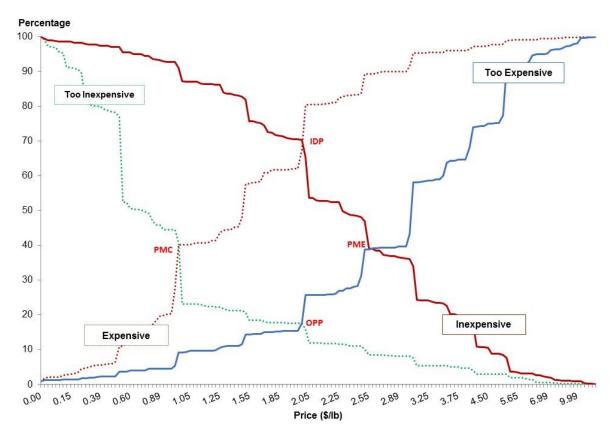


Figure 5-1. Price Sensitivity Meter: Non-purchasers of all peaches

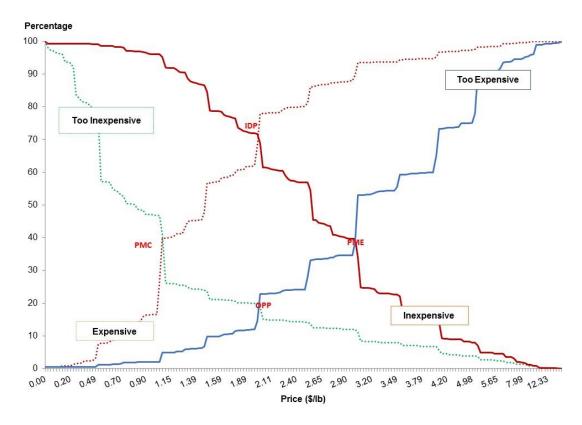


Figure 5-2. Price Sensitivity Meter: Purchasers of all peaches

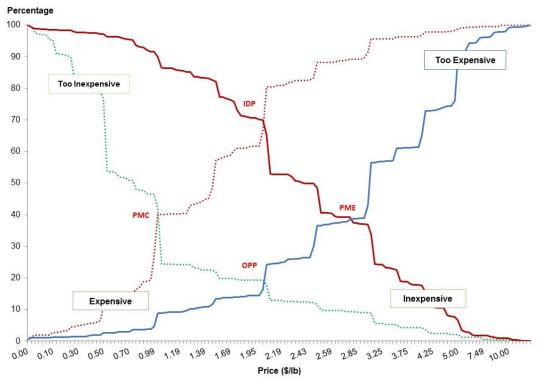


Figure 5-3. Price Sensitivity Meter: Non-purchasers of Florida peaches

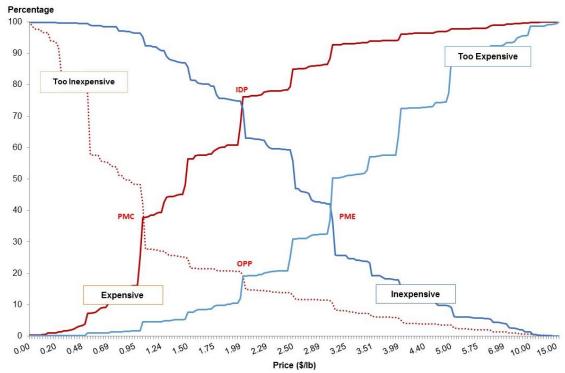


Figure 5-4. Price Sensitivity Meter: Purchasers of Florida peaches

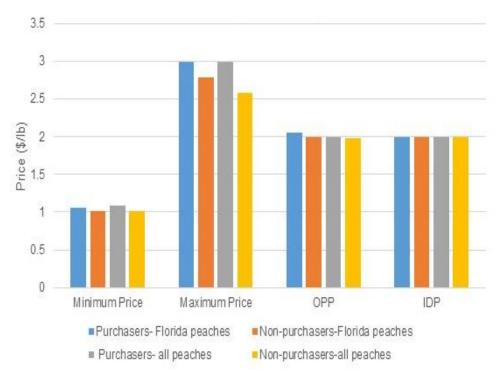


Figure 5-5. Consumer willingness to pay for peaches

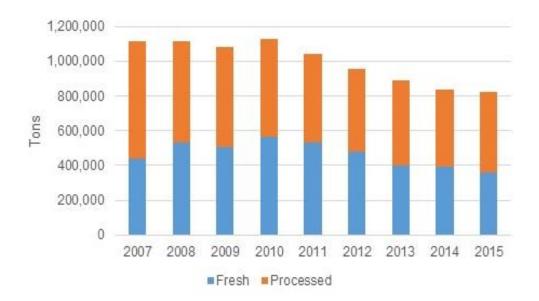


Figure 5-6. U.S. utilized peach production by peach type. Obtained from U.S. Department of Agriculture, National Agricultural Statistics Service. Various years. Quick Stats- Peaches and Blueberries. Washington DC. https://quickstats.nass.usda.gov/.

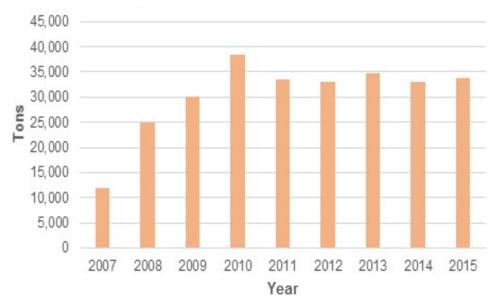


Figure 5-7. Georgia's utilized peach production. Obtained from U.S. Department of Agriculture, National Agricultural Statistics Service. Various years. Quick Stats- Peaches and Blueberries. Washington DC. https://quickstats.nass.usda.gov/.

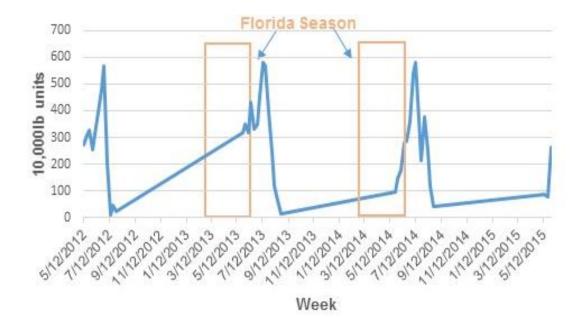


Figure 5-8. Movement of Georgia Peaches. Obtained from U.S. Department of Agriculture, Agricultural Marketing Service. Various years. Market News-Peaches and Blueberries. Washington DC. https://www.ams.usda.gov/market-news/fruits-vegetables.

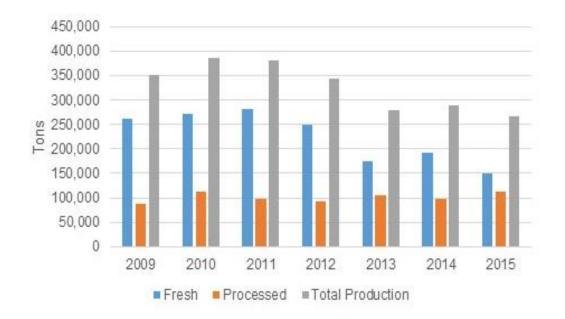


Figure 5-9. California peach production by type. Obtained from U.S. Department of Agriculture, Agricultural Marketing Service. Various years. Market News-Peaches and Blueberries. Washington DC. https://www.ams.usda.gov/market-news/fruits-vegetables.

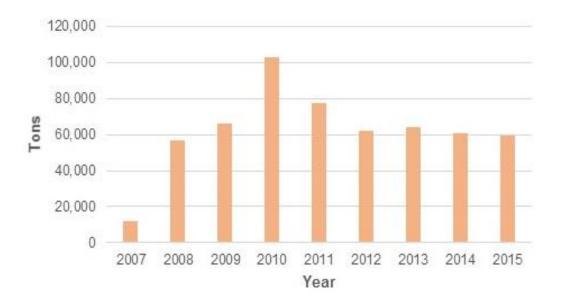


Figure 5-10. South Carolina utilized peach production. Obtained from U.S. Department of Agriculture, National Agricultural Statistics Service. Various years. Quick Stats- Peaches and Blueberries. Washington DC. https://quickstats.nass.usda.gov/.

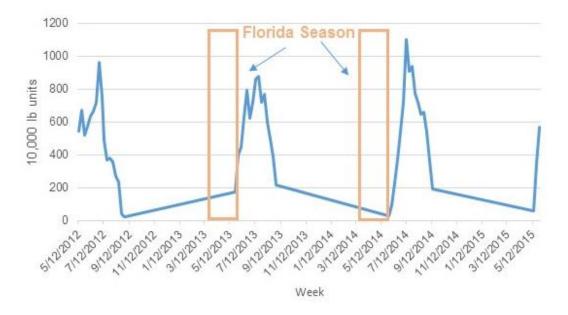


Figure 5-11. Movement of South Carolina peaches. Obtained from U.S. Department of Agriculture, Agricultural Marketing Service. Various years. Market News-Peaches and Blueberries. Washington DC. https://www.ams.usda.gov/market-news/fruits-vegetables.

CHAPTER 6 CONCLUSION

Specialty crop marketing in Florida presents unique challenges to each individual industry. As shown through the case studies presented for the Florida blueberry and Florida peach industries, unique opportunities also exist for marketing Florida specialty crops. A common theme arose for both industries from the case studies: consumer education is a key factor in increasing the marketability of Florida peaches and blueberries. In the case of both fruits, consumers were unaware of the crop's seasonality and many consumers were also uninformed that the fruits were grown in Florida at all. This points to an opportunity for research to continue into consumer awareness of other specialty crops in the state. Consumers that live in Florida generally have a higher knowledge of what fruits are grown in Florida and of their seasonality, but the opportunity to increase consumer knowledge for Floridians still exists. Increasing consumer knowledge of Florida-grown products serves to increase demand for Florida specialty crops which may result in higher market prices and greater sales for Florida growers, rendering these findings useful to both industries.

Another common thread for the Florida peach and blueberries industries is the unreliability of harvest volumes and fruit quality due to a number of factors, including weather variability and differences in cultivars. It was seen that this was a main point of contention between fruit growers and their marketers or large retailers. It is important for the health and continued success of the Florida peach and blueberry industries that there be a reliable source of information on predicted crop volumes available to both marketers and retailers to facilitate the buying and selling of peaches and blueberries. It is equally important that marketers and retailers educate growers on expected quality

and size standards in order for growers to provide more quality harvests and lower the risk of rejected crops or damaged reputations. These tasks may be best completed through industry associations working toward the successes of their industries.

It is recommended that the effects of the marketing plans presented in the Florida blueberry and peach case studies be measured for effectiveness following the 2018 peach and blueberry seasons. The dissemination periods for both marketing plans were close to the starts of the 2017 seasons, therefore, allowing a full year of tactic implementation is recommended. The measurement should assess the volume of use of each tactic by both marketing groups and individual growers. Of the most utilized tactics, the most effective and most ineffective messages should be noted and this information should be used to inform an updated version of the marketing plan for future use.

APPENDIX A BLUEBERRY MARKETER INTERVIEW GUIDE

This document was used to guide the discussions with Florida blueberry marketers during in person interviews to gain information regarding current marketing practices of blueberry marketers and to identify the prevailing industry barriers and challenges to the blueberry marketers.

Introduction: This interview serves to provide information for researchers developing a marketing plan for Florida blueberry marketers. The finished plan is to be shared with all Florida blueberry marketers as a suggested guide for reaching consumers, based on reported consumer preferences. Any information you provide in this interview will be kept in confidence.

- Please explain how you currently market Florida blueberries and how this practice is different from your practices for another state's blueberries.
- Who is the primary target audience for your marketing plan and why did you choose to market to that entity?
- What are the greatest strengths of your current marketing practices?
- What opportunities do you see for marketing Florida blueberries as a specialty commodity?
- What are the greatest weaknesses of your current marketing practices?
- Please describe the challenges you face in either developing or implementing a marketing plan for Florida blueberries.
- How would you describe your marketers' relationships with your producers and with consumers (retailers or end-consumers)?
- What is the most-preferred method of communication between producers and your marketers and why?
- What would be important for you to know about a suggested marketing plan, based on this research, for it to be deemed credible by you and your colleagues?

Thank you for your time.

APPENDIX B PEACH MARKETER INTERVIEW GUIDE

This document was used to guide the discussions with Florida peach marketers and growers during in person interviews o gain information regarding current marketing practices of peach marketers, as well as to identify the prevailing industry barriers and challenges to Florida peach marketers and growers.

Introduction: This interview serves to provide information for researchers developing a marketing plan for the Florida peach industry. The finished plan will be shared with all Florida peach marketers and growers as a suggested guide for reaching consumers, based on reported consumer preferences. Any information you provide in this interview will be kept in confidence.

- Can you give me an overview of the Florida peach industry?
- Can you give me an overview of your marketing group including information on your history and your number of contracted growers?
- What current marketing practices do you engage in?
- Is there retailer demand for Florida peaches, specifically?
- Do you see any untapped opportunities for marketing Florida peaches?
- What has already been done to increase awareness that Florida grows peaches?
- Who is the primary target audience for your marketing tactics and why did you choose to market to that entity?
- How do you differentiate your Florida peaches from other peaches in a retail setting?
- How do your marketing practices differ between marketing to consumers and marketing to retailers?
- Can you walk me through the strengths, weaknesses, opportunities, and threats of your current marketing practices?

- Do you contract growers season-by-season or over several years of contracted harvests?
- Who are the biggest competitors of Florida peaches, based on both volume and taste/attractiveness?
- Why are Florida peach growers and marketers against establishing a marketing order?
- Do you believe a Florida Peach Growers Association would be helpful to the Florida peach industry?
- What is the most-preferred method of communication between growers and your marketers and why?
- What would be important for you to know about a suggested marketing plan, based on this research, in order for it to be deemed credible by you and your colleagues?

Thank you for your time.

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BIOGRAPHICAL SKETCH

Tori Bradley completed her Bachelor of Science degree at Florida State University in December 2014, where she majored in public relations and economics. At the University of Florida, Tori majored in food and resource economics. She combined her study time with an assistantship with the UF/IFAS Public Issues Education Center, where she studied the marketability of Florida specialty crops. She received her Master of Science degree in spring 2017.