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	Department of Agricultural Economics MICHIGAN STATE UNIVERSITY East Lansing, Michigan 48824 MSU is an Affirmative Action/Equal Opportunity Institution			

# Potential Demand for Apple Hard Cider in Michigan<sup>1</sup>

By

Denise Y. Mainville Assistant Professor Dept. of Agricultural & Applied Economics Virginia Polytechnic Institute & State University <u>mainvill@vt.edu</u>

H. Christopher Peterson Nowlin Chair of Consumer Responsive Agriculture Dept. of Agricultural Economics Michigan State University <u>peters17@msu.edu</u>

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#### **Executive Summary**

This paper reports the results of market place and consumer research for hard apple cider. The objectives of the research were to determine potential demand for and constraints to the supply of hard apple cider in Michigan. The research was undertaken using on-site and focus group interviews of managers of microbrews, brew-pubs, restaurants and retailers. The research revealed much enthusiasm over HC market potential among purveyors interviewed, particularly among microbrewers, brew-pubs, and specialty retailers. Respondents estimated the potential value of Michigan hard cider market to be relatively small but significant-from 1-5% of purveyors' alcohol sales, and as high as 20% in some cases. Potential hard cider consumers are diverse and include 1) traditional microbrew connoisseurs, 2) young, adventurous drinkers who are driving the "malternative" trend, and 3) the "significant others" and other companions of microbrew connoisseurs who seek an alternative to the heavier beers served in microbrews. While microbrew connoisseurs are likely to gravitate toward a more traditional, drier cider, "malternative" drinkers and the "significant others" are likely to prefer a sweeter product. Compared to other respondents, microbrews showed particular enthusiasm for producing and marketing hard cider. While microbrews and brewpubs would market the product on tap, restaurants and retailers will more likely market a bottled product. The primary impediment to consumer acceptance of the product is a lack of familiarity, and numerous promotional efforts that could overcome these constraints were suggested. Demand for hard cider is likely to be somewhat seasonal, however there are numerous hard cider themes and products that might serve to mitigate this seasonality. While strong enthusiasm for the marketability of a Michigan-brewed product was expressed by respondents, an organic or "all-natural" product was not felt to have potential due to both demand and supply constraints. The primary constraints to supply of hard cider in general are the cost and availability of ingredients, as well as regulatory and taxation issues.

#### 1 Introduction

The paper reports the results of marketplace and consumer research for hard apple cider. The objectives of the research were to determine potential demand for and constraints and parameters for the supply of hard cider within the state of Michigan. The impetus for the research was the identification of possible opportunities to expand demand for Michigan-grown apples, as well as opportunities to add value to these products by processing them into fermented beverages, a sector which is, to date, relatively undeveloped, and which shows substantial potential for growth. Beneficiaries to the development of such an industry would include apple growers, processors (such as microbreweries), retail and food service establishments, and consumers.

#### 2 Background

This research was funded by the USDA, the Michigan Department of Agriculture, and Michigan State University's Project GREEEN. The objective of the research was to establish a fermented apple beverage program for the State of Michigan and the Midwest.

Research investigating consumer preferences for Michigan apple hard ciders and wines was funded by the USDA in the 2002 VADG program with a grant given to the Michigan Apple Committee. Michigan has an extensive infrastructure poised to create and successfully launch new apple products. Large acreages, experienced growers, storage and transportation facilities, extensive processing capabilities, and support organizations are well established in the state.

Apples are Michigan's largest fruit crop by volume. A recent survey conducted by the Michigan Apple Committee ranked new product development and marketplace research as high priorities for the growers, cider makers, major apple processors, and wineries. Producers are challenged to innovate new products and alternative marketing channels. Development of high value products would offer important opportunities to Michigan apple growers by stimulating overall demand.

# 3 Methods

The marketplace research consisted of two efforts. The first was oriented to gauging consumer acceptance of the product and different promotional efforts. The second, reported on here, utilized key informant interviews to research the market potential of the product. Data was collected between January 15 2003 and August 15 2004 using focus groups and individual onsite interviews.

Three key decision maker groups were identified as important to the long term success of a Michigan hard cider industry: brew pub/microbrewery operators, restaurateurs/chefs, and specialty (wine and beer) store operators. Microbrewery operators were reached through two focus groups: at the Big Buck Brewery, Troy – involving Eastern Michigan area members of Michigan Brewers' Guild (March 16, 2004); and at the Grand Rapids Brewing Company, Grand Rapids – involving Western Michigan area members of Michigan Brewers' Guild (March 16, 2004); and at the Grand Rapids Brewing Company, Grand Rapids – involving Western Michigan area members of Michigan Brewers' Guild (March 18, 2004). Many of Michigan's leading microbreweries were represented. Chefs providing input through a Southeast Michigan focus group: Sunnyside Chapter – International Culinary Federation (ICF) Chefs, St. Clair Shores (March 15, 2004). Due to challenges in organizing a focus group among specialty store operators, personal interviews were conducted (August/September 2004) instead of focus groups for this last segment of key decision makers. Content of these focus group and individual interviews were transcribed and analyzed using qualitative methods.

#### 4 Results & Discussion

4.1 Demand

# 4.1.1 Potential market value

The research revealed much enthusiasm over HC market potential among purveyors interviewed, with particularly among microbrewers, brew-pubs, and specialty retailers. Respondents estimated the potential value of Michigan hard cider market to be relatively small but significant—from 1-5% of purveyors' alcohol sales, and as high as 20% in some cases.

Specifically, retailers (such as party stores, specialty retailers (e.g. Dusty's Wine Cellar) and supermarkets) anticipated that hard cider sales might represent from 1-5% of their sales and as much as 25% of their sales in the "malternative" category (which includes spirits-branded drinks such as Bacardi Breezers, Coolers, hard lemonade, hard cider and other products such as Hard Iced Tea and Zima),. These responses varied significantly depending on the type of retail outlet that was being interviewed. Specialty retailers and those in areas heavily frequently by tourists felt that hard cider would have the best chances (closer to 5%) while party stores and markets serving more mainstream, cost conscious consumers were less optimistic, more frequently anticipating that hard cider might represent 1% of their market. Loyal repeat customers are likely to form an important part of specialty retailers' hard cider buyers—one specialty retailer who carries hard cider pointed out that 80% of the cider brand he markets (Blackthorn Dry Cider) is purchased by a handful of clients.

Microbreweries and brew-pubs were the most optimistic of the purveyors interviewed about the potential of hard cider in their sales. Most respondents felt that hard cider could represent between 1% and 5% of their sales, and that from 5-10% of their consumers would be occasional consumers of hard cider. For those who felt that they were in the right place and had the right clientele, hard cider was anticipated to have the potential to reach 20% of their total sales.

Chefs were mixed in their responses about the potential for hard cider. They did not tend to know much about it, and sensed a similar lack of awareness among consumers. Furthermore, while some felt that a Michigan hard cider would fit well with the "local cuisine kick", others felt that cider had an "image problem", being seen as fresh cider turned bad.

# 4.1.2 Potential clientele

The potential clientele for hard cider is diverse, suggesting there are numerous ways to market it that can target a broad range of consumers in Michigan. Hard cider consumers are diverse and include 1) traditional microbrew connoisseurs, 2) young, adventurous drinkers who are driving the "malternative" trend, and 3) the "significant others" and other companions of microbrew connoisseurs who seek an alternative to the heavier beers served in microbrews. Another client group with unmet demand is the home brew market—there are currently no known hard cider brew kits on the market despite interest by the home brewers.

In microbreweries and brew-pubs, hard cider is anticipated to appeal to a broad audience, and may have the potential fill a niche that is as yet unfilled. Respondents identified both their core clientele—those who frequent micro-brews to get high quality, rich beers and who are interested in trying new products as long as they are flavorful and high quality, as being fairly knowledgeable about and interested in hard ciders. Many of these clients will be interested in a more traditional cider that is drier and less sweet.

A second important clientele are those adventurous consumers who are interested in trying novel products, but who in many cases gravitate toward a sweeter, lighter product than many of the more traditional microbrew clientele. These clients tend to be relatively young—in their twenties

or thirties, and don't yet have established tastes making them interested in experimenting new and novel products. These are, in many cases, the consumers who have driven growth in the "malternatives" category which doubled its sales between 1998 and 2002 [Mintel, 2003 #1176]. Nevertheless, it is important to look closer at the overall trend and recognize the most category growth is due to the sale of spirit-branded malternatives (e.g. Bacardi Breezer) whose sales increased from 10% to 48% of the segment between 2000 and 2002, during which time the sales of every other malternative product decreased with the exception of hard lemonade (hard cider sales fell 23% during this period, moving it from 8% of malternative sales to only 4%) (Mintel 2003 p14). Within the malternatives category, hard cider offers a more authentic, natural alternative to artificially-flavored wine coolers, and thus can appeal to those consumers who seek the light, sweet taste characteristics of malternative, but without the artificial ingredients so many of them contain. While this group includes both women and men, women are felt to be an especially important part of this category as they often find beer too bitter or bold. Some respondents projected that their hard cider clientele could be as much as 80% female.

The third group that brewery respondents felt would form an important part of the hard cider market are a clientele group that they have had a hard time pleasing—the social companions or "significant others" (SO) of beer drinkers. The SO crowd are those who accompany beer drinkers to microbrews but do not themselves have the taste for traditionally-brewed beer, finding it heavy and unpalatable. Their main alternative to date has been a sweet house wine which has not been satisfactory for many people. Hard cider has the potential to offer an alternative to these drinkers that is novel, high quality, tasteful, and lighter than most beers. At least one respondent expressed considerable enthusiasm for this niche, pointing out that groups of potential clients sometime do not frequent his establishment because at least a few of the group didn't think they'd find anything they wanted there. This group is also likely to have a high proportion of women, and likely has some overlap with the "malternatives" clientele mentioned above.

#### 4.1.3 Flavors

Respondents emphasized that hard cider must have not only have a good taste, but also an inviting smell and color and be perceived of as "refreshing". While microbrew connoisseurs are likely to gravitate toward a more traditional, drier cider, "malternative" drinkers and the "significant others" will gravitate to a sweeter product. Thus, in order to appeal to these latter groups, hard cider should be formulated to be lighter and sweeter than craft-brewed beer, but not as sweet as a wine cooler. For example, Woodchuck, one of the best selling brands, offers five flavors that are largely tailored to the American palate for sweet drinks. In contrast, Woodpecker, which is imported, has a drier European taste, and a significantly smaller market share.

Some respondents felt that the acceptance of drier ciders could be enhanced by emphasizing the apple flavor. Likewise, the addition of other fruit flavors, such as cherry, to a drier cider could also help draw interest from more mainstream-oriented consumers.

#### 4.1.4 Packaging

Respondents were asked what packaging they would likely use if they served hard cider. Brewpubs and microbrews were consistent in their intention to offer hard cider on tap, and most stated, that they would dedicate at most one tap to hard cider at any one time (most brew pubs interviewed have between 6-10 taps on average).

While microbrews and brewpubs would market the product on tap, restaurants and retailers will more likely market a bottled product. Bottle enables the product to travel further, and they might also allow a hard cider product to be sold in a bar where there is a limited number of taps<sup>2</sup> and none available for the cider. However, among microbrews, "when it's bottled, most places don't do enough to promote it." In fact, microbrews and brewpubs indicated declining levels of enthusiasm for any beer or hard cider product that they don't produce themselves, and if they do produce their own they sell it on tap because of the high cost of bottles and bottling.

The appropriate type of bottle will differ depending on the type of purveyor. Microbrews and brewpubs that market bottles (instead of on-tap) are inclined to packaging similar to beer bottles. Restaurants and retailers, on the other hand, show interest in additional forms of packaging, such as 1 liter packages that are more like wine than beer bottles. Retailers show an interest in selling in four or six pack formats, with a "make your own six-pack" option attractive. In all cases, the labels should be colorful and eye-catching.

# 4.1.5 Potential constraints to consumer acceptance

Primary constraints to consumer acceptance have to do with unfamiliarity of the product, lack of awareness, and even negative images about hard cider (that it is just "turned" (bad tasting) juice). There are also potential cost issues (around \$7.60/6 pack for many brands).

Lack of widespread availability and sales people and restaurant staff who are not educated about cider will impede progress against these constraints. If consumers are exposed to the product and then look for it at another brewery or retail location but they can't find it, they will lose momentum and interest.

Finally, there is a lack of knowledge among consumers and purveyors about the uses of hard cider, what it can be served with, etc.

# 4.1.6 Potential marketing efforts

Respondents felt that, with the right advertising, a hard cider line could be established in Michigan in about a year. The "right" advertising included both brewery-level efforts such as

 $<sup>^{2}</sup>$  Woodchuck, one of the country's largest cider makers, has found a novel way to resolve the problem of limited tap space: they have worked with their keg supplier to develop a mini-keg (which is simply a soda canister with a beer tap on top) which fits in un-used space between the half-kegs at a bar.

informed serving staff and table tents as well as industry-level synergies like a general state-wide advertising campaign and the generally increased availability of hard cider in different locations.

Purveyors suggested numerous promotional strategies that could help expose consumers to hard cider and spur their interest in and familiarity with the product. The suggested strategies are summarized in Table 1. A concerted marketing effort between individual firms and industry/state efforts was pointed to as the most effective way to ensure widespread acceptance and growth of the Michigan hard cider market. "Americans are looking for an alternative beverage, but hard cider won't take off until a big marketing campaign tells them that this is the drink to drink."

Chefs/Restaurants	Microbrews & Brewpubs	Retailers
<ul> <li>Using it on cooking shows with the food network</li> <li>Home wine-tasting parties</li> <li>Tabletop advertising (in restaurants) so it is visually appealing rather than just on menu</li> <li>Unique packaging (flashy label, different bottle) needed to differentiate it from wine/beer</li> <li>Caterers (of weddings, etc.) often asked to recommend, client interested in trying something different</li> </ul>	<ul> <li>Word of mouth key</li> <li>Staff behind it, excited &amp; educated</li> <li>Chalkboards</li> <li>Sampling</li> </ul>	<ul> <li>"Organizational marketing"</li> <li>Internet</li> <li>Local advertising, e.g. festival</li> <li>Newspaper article, e.g. weekly wine blurbs</li> <li>Retailers need to have demand in place in order to sustain shelf space</li> <li>Statewide advertising w/Dept of Ag. support</li> <li>Advertise in beer and food magazines</li> <li>Educate sales people</li> <li>Posters, t-shirts, get it out at bars &amp; events, make name known</li> </ul>

Table 1: Suggested Promotional Strategies for Hard Cider

# 4.1.7 Seasonal aspects

Demand for hard cider was anticipated to be somewhat seasonal, with a peak during autumn when apples are harvested and people have apples on their mind, but also strong demand in summer because of its lightness. Respondents had numerous ideas about themes and products that could stimulate demand during other seasons, such as spiced ciders in the winter, early apples in the spring/summer, and different degrees of lightness/darkness and sweetness/dryness pertaining to the seasons.

#### 4.1.8 Niche/Specialty market potential

#### 4.1.8.1 Michigan-brewed and Michigan-grown fruit

Industry members were very enthusiastic about the potential success of a "Michigan-brewed" product. This enthusiasm was a reflection of both the brewers' and other purveyors' values—they are eager to produce and/or promote a Michigan product, as well as their perceptions of customer demand. Purveyors feel that both tourists and locals who frequent microbrews and other establishments (especially smaller, more unique ones) are eager to experiment with, consume, and support a Michigan-brewed product. One respondent pointed to the success of the Michigan wine industry as illustrative of the potential for a Michigan-brewed cider. Building on the theme, another respondent pointed to the possibility of tailoring cider marketing to the regional level—for example Northern MI (lower penninsula) with a cherry product, etc. It was emphasized, however, that in order for a Michigan-brewed product to be successful, quality must come first, otherwise Michigan-brewed will carry a stigma and the concept will backfire

The benefits of a product that is not only Michigan-brewed, but also produced exclusively with Michigan apples and cherries were not as clear. Particularly in the face of potential difficulties in obtaining inputs as ingredients, the commitment to produce only using Michigan-produced fruit could limit brewers' options, particularly if a firm were to attempt a larger volume of production. Brewers in the current research who considered the possibility of using only Michigan-grown fruit pointed out that microbreweries are unable to do so with beer that they produce (that has cherry) due to the fact that some of the cherry juice and/or concentrate they use has both Washington and Michigan cherries mixed. Thus it might be logistically difficult and cost prohibitive to try to isolate Michigan sources for these ingredients. The same case is also likely to hold for apples, unless growers purchase direct from the orchard or from other sources for which the provenance of the juice or concentrate is clear. There were no comments on the degree to which consumers would differentiate between a Michigan-brewed cider and a cider which was both brewed and whose ingredients were grown in Michigan.

# 4.1.8.2 Organic and All-natural products

Respondents were decidedly unenthusiastic about the potential for organic or all-natural cider. A number of reasons were cited, both on the demand and supply side:

Respondents were generally negative over consumers' interest in purchasing an organic or "all natural" cider, particularly in the likely event that its price was higher than a conventionally-produced one. In general, the sense was that there is little overlap between organic connoisseurs and alcohol connoisseurs, and that alcohol connoisseurs are not health conscious in the sense of seeking out a product like that. Comments in support of demand for an organic or all natural cider were few: one respondent felt that an organic product might have some potential in an area such as a college town, and another felt that a bottled organic cider, sold in a 4 or 6 pack might have some marketability.

Numerous constraints on production and sourcing for an organic product were also identified. One was simply the cost and availability of organic inputs such as apple cider—given that there are constraints in the supply of ingredients for some brewers, organic ingredients would probably be even more scarce and costly. Respondents also expressed that the production of an organic or all-natural product would be infeasible. These constraints pertain to the need for chemical agents to produce and maintain a stable cider product. In order for an all-natural product to work, it would have to be very dry, thus limiting demand. Furthermore, most ciders have "beer-level alcohol" which makes them even more fragile than wine. Finally, unlike beer which has hops that act as a preservative, cider with "beer-level" alcohol would have nothing to keep it stable.

#### 4.2 Supply considerations

Though not explored in as much depth as demand and marketing issues, supply issues were also raised in the data collection effort. A number of issues regarding cost, availability of juice, and regulatory considerations were raised, as summarized here.

Among the most pressing supply constraints identified were those of cost and ingredient supply. Specifically, some respondents were concerned that the price per gallon of fresh cider from the cider mill is too expensive to be sustainable. Other possibilities include pressing one's own apples, though this requires extra facilities which increase cost, requires space, and also entails the cost of transport of the raw material to be pressed. Another option (used by some of the national hard cider brands) is to use apple concentrate instead of juice. This could help to reduce costs (relative to transporting either fresh juice or apples for pressing). Using malt apple juice was also another suggestion—given space constraints in pubs, some respondents felt that hard cider should be produced with the least amount of processing possible at the pub level. Another suggestion was to purchase fresh juice (in a tote) from wineries—this juice could be at a point where it needs nothing but treatment of pH and fermentation. A final cost issue that was raised is that in order to have optimal flavor, hard cider should be fermented for a full year, entailing storage and inventory cost, thus necessitating that it be sold at a premium price. It is not clear, however, that all brewers feel a need to undergo such a lengthy brewing process.

While some respondents felt that any variety of apple could be used to make hard cider, others felt that specific varieties should be used (for example apples varieties that make the best cider are high in nitrogen which helps promote fermentation), and that these varieties should be kept separate prior to brewing. These requirements present a constraint to potential hard cider producers—not only do they lack access to information about where to purchase specific varieties (the USDA does not maintain such records, for example), they also cannot necessarily be sure what commercially purchased juice or concentrate might contain.

The production issues raised above are most relevant to microbrews that would produce hard cider on-site. The nature of their license requires that they market their own product on premise. In contrast, brewpubs have a Class C liquor license, which permits them to purchase a finished product—this would allow them to work with another supplier—for example a winery, a cider mill or a brewer/bottler, to acquire a finished product rather than producing and marketing it

themselves, something they are expected to be reluctant to do considering licensing issues which prevent them from distributing their own product beyond their own premises.

Finally, another impediment cited related to regulatory issues—for one, production of hard cider requires possession of a small wine-maker's license, which few firms have. This was particularly important for the micro-brewers, the group that was most enthusiastic about hard cider, because its production requires that an additional license be purchased. Secondly, taxation issues are complex, with tax rates changing depending on the alcohol content of the drink as well as the number of different ingredients, the use of fruits other than apple, etc. To quote one respondent, "The license price increased with every ingredient you added to the product and got so expensive it wasn't worth doing."

#### 5 Conclusion

In conclusion, the expert interviews with microbrews, brewpubs, retailers and chefs indicated considerable interest in hard cider as a new product worthy of exploration and promotion, nevertheless, numerous constraints exist that should be resolved in order to facilitate the development of both supply and demand. The research results also give rise to a number of issues whose resolution through further research would help to promote this market. There is a need to explore further scale issues in hard cider production and marketing, the implications of regulations and tax policies on incentives to produce hard cider, among others.