A Business Plan to Implement Procedures and Operations of Snail Farming for Higher Ground Farm

A Major Qualifying Project Submitted to the Faculty of

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Abstract

The local food movement is influencing the food industry in cities like Boston and Worcester, Massachusetts. Sponsored by Mr. John Stoddard, owner of Higher Ground Farm (HGF) in Boston, this project aims to increase profitability by expanding the current organic vegetable farm into a snail farm. To achieve this goal, we developed a business plan on how to implement strategies for a snail farm business. Based on interviews with locally sourcing restaurants, secondary research, and analytical tools, we assessed the market for snails in the Boston and Worcester areas.

Acknowledgements

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Executive Summary

Introduction

Higher Ground Farm (HGF) is an example of a small business that struggles to make a profit. Mr. John Stoddard, owner and co-founder of HGF, has been operating HGF for the last five years. Unfortunately, the farm is making lower profits than originally expected. HGF makes just enough money to pay off the operational costs of the farm. Currently, he is the only full time employee on the farm, relying on volunteers to help him grow and sell his crops to current business partners in Boston. However, his only source of income is from his other full time job. To overcome the financial burdens he faces with HGF, he is looking to expand his business by adding a snail farm to his brand. This Major Qualifying Project (MQP) aims to develop a business plan for a profitable rooftop snail farm in the city of Boston.

Objectives

This Major Qualifying Project (MQP) will expand the research concluded by the IQP team by developing a business plan for John to successfully grow and sell snails to a number of restaurants in Boston and Worcester area by applying the following methods:

- Research the aspects for a business start-up plan for Higher Ground Farm.
 - The business plan aspects are: Executive Summary, Company Description, Products and Services, Marketing Plan, Operational Plan, Management and Organization, Financial Plan, and Appendix. We used analytical tools such as the Business Model Canvas (BMC) and the SWOT analysis to outline the sections of the business plan. This business plan will help to implement strategies for a snail farm business for Mr. Stoddard in order to increase profitability for HGF.
- Identify and understand the prospective market.

By conducting interviews with various restaurants in Worcester and Boston, we developed a profile of the prospective customers for Higher Ground Farm. The restaurants that we interviewed were Armsby Abbey, Asta, Bancroft, Boynton, deadhorse hill, Figs & Pigs, Garden Fresh, Niche Hospitality Group, Sole Proprietor, and The Hourly.

 Determine the best practices in operations and benchmark known snail farming techniques.

We analyzed the following operations in detail: permits, breeding, packaging, delivery, and finances. By performing this research, we were able to develop suggestions on successfully acquiring all the necessary resources to start a snail farm.

 Compare and contrast the most cost effective and efficient containment designs for snails.

The purpose of recommending a design is to provide John with different cost and technology levels. We were able to create a list of materials with varying automated systems to perfect the snail containment structures. We visited a recycling center to find materials that could be used in the design and could reduce future costs of the snail farm.

Findings

Our main sources of data for this project were our interviews and secondary research.

Through our interviews, we gained a sense of how restaurants in Boston and Worcester feel about local food. From this we determined what characteristics HGF should be looking for as a potential customer. Some key takeaways from these interviews were:

- Restaurants source local food to stay current with food trends
- 70% of restaurants expressed interest in snails

- Menus are changed every two weeks because they are looking for new dish inspirations
- HGF can benefit from restaurant associations, chef collaborations, and aggregators
 For creating a containment design for snails, these were the key findings:
 - The snail containment structures will consist of materials such as raised wooden boxes,
 chicken wire, soil, a hammer, nails, lightweight concrete, a trowel and tub, mist systems,
 a humidity temperature meter and a soil moisture meter.
 - The operating expenses will include a PPQ 526 Permit, rent, utilities, liability insurance, advertising, breeding snails, snail feed and packaging for the snails.
 - If overcrowded, the growth rate of the snails will slow down and can cause health problems. Therefore, having a free range option in the future will benefit the snails.
 Otherwise, limited reproducibility and a lowered lifespan is detrimental to the farm.
 - A timing system to control and monitor the watering/sprinkler systems will help regulate the moisture within the structures.

Recommendations

- 1. HGF should develop marketing strategies by targeting locally sourcing restaurants and improving its website.
- 2. For future endeavors, HGF should connect with aggregators and approach new markets.
- 3. HGF should start the snail farm with ten containment structures and focus on environmental controls.
- 4. HGF should prioritize environmentally friendly practices by using recycled products and minimizing waste.
- 5. HGF should continue the volunteer program to help care for the snails.

- 6. Snails should be sold at a price of at least \$50 per pound; this price can be modified with customization of the product.
- 7. HGF should apply for a grant from Beginning Farmer Network (BFN) of Massachusetts.

Authorship

The Introduction was written by Travis Clark.

The Background section was divided amongst the four members of the team in this order:

- Business techniques was written by Hannah Navarro
- Snail farming, breeding, and containment was written by Alyssa Perry
- Farm operations and snail industry overview was written by Zulean Cruz-Diaz
- Disease and quality control and the benefits of snails was written by Travis Clark

In the Methodology:

- Business aspects were written by Hannah Navarro
- Understanding the market was written by Travis Clark
- Operational aspects were written by Zulean Cruz-Diaz
- Snail containment details were written by Alyssa Perry

In the Results section:

- Market analysis was written by Hannah Navarro
- Containment overview was written by Zulean Cruz-Diaz
- Cost analysis was written by Alyssa Perry

Both the Analysis and Recommendations were written together as a team. All the edits were completed as a team as well.

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1.0 Introduction

Small businesses are critical components to the economy at large. They introduce new job opportunities and innovation in small communities. "According to the U.S. Small Business Administration (SBA), small businesses represent 99.7 percent of the all employer firms," this means that most of the United States is employed by small businesses of 500 employees or less (Brown, n.d.). Small businesses also promote the local economy and unity within the community. Unfortunately, it is not so simple to start up and keep a small business running. There are many difficulties with keeping a small business afloat and making a profit. Higher Ground Farm is an example of a small business: it strives to use innovative and sustainable farming techniques and connects the community around healthy organic food.

Higher Ground Farms (HGF) is a small, organic farm business located above the Boston Design Center in Boston, Massachusetts. Mr. John Stoddard, the owner of HGF, had the vision to create a rooftop farm, grow organic foods, and sell to local restaurants to help raise awareness for local, healthy food. He would like to farm full time but cannot afford to because his farm only breaks even. Through the Interactive Qualifying Project (IQP) sponsorship, Mr. Stoddard explored the possibility of selling snails to his local restaurant customers to make more profit and to take advantage of a niche market. This Major Qualifying Project (MQP) expands the research of the IQP team by developing a business plan for Mr. Stoddard to successfully breed and sell snails to a number of restaurants in Boston and Worcester.

The goal of this project is to help Mr. Stoddard develop a business plan for a profitable rooftop snail farm in the city of Boston. In order to accomplish this goal, the team identified four main objectives:

1. Research the aspects for a business start-up plan for Higher Ground Farm.

- 2. Identify and understand the prospective market.
- 3. Determine the best practices in operations and benchmark known snail farming techniques.
- 4. Compare and contrast the most cost effective and efficient containment designs for snails.

2.0 Background

This section of the report will provide the information to understand the concepts from which a plan is developed in order to meet the desires of Mr. Stoddard, the owner of Higher Ground Farm. It will further discuss business techniques, the local food movement, marketing of snails, snail farming details, and operations of a snail farm.

2.1 Business Techniques

Two business techniques, Business Model Canvas and a Startup Business Plan, will be discussed in this section to address the objectives of the project.

2.1.1 Business Model Canvas

The first business technique that will be discussed is the Business Model Canvas (BMC). According to Joyce and Paquin (2016), the BMC provides insight into the calibration of high level strategies and the basic actions of a business. There are three aspects to consider when using the BMC as a strategic tool:

- 1. How key components and parts are integrated to convey the value of a business to the customers
- 2. How these parts are interconnected throughout the entire business
- 3. How the business generates profit and values through this network of parts

The nine components of the BMC answers the following questions in *Table 1* (Strategyzer, 2016):

Customer Value Proposition	Customer Segments	Customer Relationships
What Value do we deliver to the Customers? Which one of our Customers	For whom are we creating value?	What type of relationship does each of our customer segments expect us to establish and maintain with them?
problems are we helping to solve?	Who are our most important Customers?	Which ones have we established?
What bundles of products and services are we offering each customer segment?		How are they integrated with business model?
Which customer needs are we satisfying?		How costly are they?
Channels	Costs	Revenue Streams
Through which channels do our customer segment want to be reached?	What are the most important cost inherent in our business model?	For what value are our customers really willing to pay?
How are we reaching them now?	Which key resources are the most expensive?	For what do they currently pay?
How are our channels integrated?	Which key activities are the most expensive?	How are they currently paying?
Which ones work best?	Is your business more:	How should they prefer to
Which ones are most cost- efficient? How are we integrating them with customer routines?	Cost driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing)	pay? How much does each revenue stream?
Key Partners	Key Resources	Key Activities
Who are our key partners? Who are our key suppliers? Which key resources are acquiring from partners?	What Key Resources do our value propositions require? Our distribution channels? Customer Relationships? Revenue Streams?	What Key activities do our value propositions require? Our Distribution Channels? Customer Relationships? Revenue Streams?

When using this tool for the development of a business, it is important to understand the difference between a BMC and a business plan as a whole. A business plan consists of the practical entrepreneurial steps to follow for the business while the BMC is more of a representation of a business idea overall (Türko, 2016). Business plans provide a formal and detailed description of a business model of a project because it expands upon a BMC into more detailed issues. The BMC is described as a "visual modeling method" to develop the framework for a business plan (Fritscher & Pigneur, 2014).

2.1.2 Startup Business Plan

We have explored different forms, structures, and details of business plans and analyzed them to deliver a complete business plan. Business plans are an organizational tool to interpret a business' goal and strategy. This tool allows owners to map out the business ideas and explain company resources in a detailed document (Fiore, 2005). The focus of a business plan is to define goals, identify risks, organize thinking, set priorities, designate resources, spotlight key points, plan for challenges, and develop opportunities (Fiore, 2005).

When developing a business plan, the objectives to understand are: 1) the industry involved, 2) the competitive market, and 3) the customer base (Butler, 2007). The three objectives are further explained through the sections of the plan. Each of these sections are essential for creating a well thought out business plan to be presented to Mr. Stoddard, the owner of the Higher Ground Farm.

According to *My Start-Up Plan: The business plan toolkit* written by Clare Griffiths and Brad Crescenzo (2012), there are several components to be considered when beginning the development of the plan. The components vary by title, but each component contains all of the necessary information for the business plan. The following sections will explain each component

in more detail.

2.1.2.1 Executive Summary

At the beginning of the business plan, it is important to understand the fundamentals of the business. The executive summary briefly describes the product, customers, owners, and what the future is for the business in a concise and professional manner ("Business Plan for a Startup Business Template," 2017). This is essentially a summary of the overall report. This section needs to be concise and persuasive since it summarizes the ideas of the entire plan.

2.1.2.2 Company Description

The company description highlights the business' ambitions and goals. This is the section where the owner of the business will figure out the reasoning behind the business such as: why run the business, what does the future look like, and what does the business represent. A framework for the future is established in this section to then lead to the business mission. It is crucial to provide the specific objectives that will be used to achieve the mission and goal.

2.1.2.3 Products and Services

In the products and services section, the owner forms the ideas the business will be offering. "What specific products and/or services will [the] business sell and why?" (Griffiths and Creszeno, 2012, Chapter 3). When answering this question it is important to fully consider what the customers want. Customers are the most crucial because of their opinions about the product. When customers give feedback about a product or service, companies can use this to construct their product/service to what their customers are demanding. Therefore, it is extremely important to fully consider customers when making business decisions.

When considering the customers, it is important to think about the benefits and impact the products/services will have for the customers. A compare and contrast analysis can be used here

to decide what makes the product/service unique compared to the competitors in the industry (Griffiths and Creszeno, 2012). This means mapping out how this product stands against its competitors. The choice of materials to be used, the location, and the targeted customer base can determine what impact the business has on the market. More information collected about these choices can lead to creating a clear idea about the potential customers and where the business stands compared to competitors in the area (Pinson, 2014). Intellectual property protection steps such as copyright, design rights, patents, etc. are included in the company description. These legal documents will aid the business on how to use their services and how they can sell their products to customers (Griffiths and Creszeno, 2012).

2.1.2.4 Marketing Plan

In the marketing section of the business plan the customers, product, and competitors are analyzed to determine the market niche of the business. First, it is important to question the number of potential customers your product/service can attract and how this will change over time. A way to approach this is by following the steps below (Griffiths and Creszeno, 2012):

- 1. Set your customer criteria
- 2. Calculate the percentage of the total market size
- Calculate what percentage of the customer pool could potentially make a decision on what to actually purchase
- 4. Calculate how many customers could actually make a purchase
- 5. Determine what the time period is to acquire the customers

Next, it is essential to establish who your market competitors are. Every business has two types of competitors: direct and indirect. Direct competitors are businesses that offer a similar product/service as your business while indirect competitors offer different products/services but

are selling them to the same target market and at a very similar price. The identification of competitors allows for a better understanding of what makes your business unique and how to differentiate your business more effectively. A way to differentiate your business is through the use of innovation because there is a constant development of ideas and adaptation to the constant changing technology in the industry.

It is important to determine the features and benefits of the product to be able to determine which business strategies can be used to promote and advertise the product. Marketing activities allow the business to expand on promotion and their development of the product. Marketing messages are used to determine what your customer needs are and to highlight the benefits and selling points of your business. A few examples could be advertising, networking, and emails.

Once the strategies are chosen, make sure that they reflect the values and attitudes that the business wants to represent (*Figure 1*). This means making sure that when promoting the business, there is an emphasis on the uniqueness, benefits and values of the product.

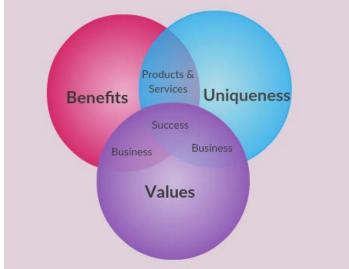


Figure 1 Marketing Motivations (adapted from "My Start-Up Plan: The business plan toolkit," Griffiths and Creszeno, 2012)

2.1.2.5 Operations Plan

The operations plan explains the daily operations of the business, its location, equipment,

people, processes, and the surrounding environment ("Business Plan for a Startup Business Template," 2017). This section is where the production methods are detailed such as: techniques and costs, quality control, customer service, inventory control, and the full development of the product. When thinking about these concepts, legal processes need to be considered (Griffiths and Creszeno, 2012). The legal environment includes the intellectual property in relation to the facility such as, licensing, permits, regulations, zoning and building codes, and insurance.

2.1.2.6 Management and Organization

As a result, staffing is needed to complete all the necessary operations for the business plan. The owner has to identify who will play what role in the business. This is where the owner will question who is going to manage the business on a day-to-day basis and what is going to be managed ("Business Plan for a Startup Business Template," 2017). The staff members in each role create the backbone of the business; that is why this is could be identified as the most important component of the development of a startup. The guidelines for training methods and requirements are included in this part of the business plan.

2.1.2.7 Financial Plan

Finally, the area of costs and income constitutes whether the business is viable and profitable. It is essential to figure out how much money is needed and then create a personal survival budget. A personal survival budget not only shows how much money the owner needs to survive, but it also tells them how much profit the business needs to generate, so that they can make informed decisions about the pricing for the product/service (Business Wales, 2016). This personal financial statement presents useful information showing assets and liabilities held outside the business and personal net worth ("Business Plan for a Startup Business Template," 2017). Additionally, pricing is also affected by the time you want to spend on your business, meaning the

production and development costs. It is important to figure out how many sales your business will make realistically over time while still considering production, staffing, and operational costs.

Financial planning for a business is a key portion of a business plan. There are five key documents to be developed in this portion:

- 1. **Personal Survival Budget** effectively summarizes all of the owner's personal expenses over a period of time (Butler, 2007).
- 2. Break-even Analysis is what breaks down different costs involved in a business. Fixed costs, generally considered to be overhead costs, would include expenses like rent, rates, management and administration costs, and insurance. Variable costs are defined to be the costs in relation to the changes in sales or output. These costs include raw materials, production, labor, and distribution. Both of these costs are used to determine the break-even point for sales revenue. Break-even analysis is a tool that aids to the management of the profits for a company (Tucker, 1963). This analysis is applied when trying to determine the break-even point of the company. The break-even point informs the business of how many units of the product must be sold in order to meet the cost of the products. To be profitable, the number of units sold must exceed the determined break-even point (Rauf, 2010).

The following equation is used to calculate this point:

Meanwhile, the contribution margin method uses a different equation:

Break-even Point = (Fixed Costs / Contribution Margin)

Contribution Margin = (Price - Variable Cost per unit)

When calculating profit margins and determining prices, it is important to keep in mind how the

break-even level can change.

3. **Budgetary Plan** explains income and expenditures in detail over a fixed period of time. There are two approaches in preparing a budgetary plan, historically based and zero-based budgeting. Historically based budgeting is the most popular approach when creating a budget. With this approach you can use previous financial data and adjust it for any anticipated changes. This process is very simple, easy to understand, and reliable for business owners.

Zero-based Budgeting is for a brand new budget; any previous information, figures, or data are not used or analyzed. This process allows for the development of the budget's baseline and requires every cost in the business to be justified right from the beginning (Askew, 2016). The technique encourages critical thinking and can offer big savings with its simple approach. People that take this approach for their budget are taking a risk because it is elaborate, intricate, costly, and does not give any guarantees. Zero-based budgeting first starts at zero which then leads the owner to establish the case for resource allocation based on costs versus benefits. Every step has to be detailed and evaluated in order to implement this technique.

When creating the base for the zero-based budget, communication and training for the owner is key to assist in the aiding of culture change and the support of the long-term benefits. For a successful operation, as stated by McKinsey Advisors, the business owner should establish a "central coordination" model to develop a "deep visibility into costs" and establish systems and procedures for what is required for this type of budgeting (Askew, 2016). This would create the framework for the execution and development of the budgeting plan. Decision packages are created based on the business function, the variety

of performance measures, and the analysis of cost versus benefit. Finally, EY Ahluwalia states that the final stretch of implementation is the focus on sustaining benefits and scaling-up the process (Askew, 2016). There are several factors to consider for this approach but it allows for a larger scope for the business and a greater range of flexibilities. In the end, this approach is very useful and is a practical management tool for budgeting (Butler, 2007).

4. Cash flow forecast is concerned with identifying levels of income and expenditures for every part of the budgetary period, this can be depicted in *Figure 2*. This allows for several topics to be discussed such as cash-balances from previous periods and payments for suppliers and from customers. This outlines all the bills, payments, and pay-flow for the business so you can stay up to date with everything required for operations (Butler, 2007). It is necessary for management to plan for the known costs and allow room for contingency for any unanticipated problems such as, late or withholding payments. A cash flow forecast highlights areas where improvements or savings can be made in the business. It can also allow for additional benefits in potential areas of the company ("Cash Flow Analysis: Financial Skills," 2013).



Figure 2 Cash Flow Forecast

5. **Profit/loss forecast** predicts the profit and losses over the upcoming financial year for a business. It involves two primary accounting statements for the business: balance sheets and profit and loss accounts. Both of these statements are produced at the end of a financial

year. Since HGF is an existing company, but entering a new market, we will use pro-forma statements which are predictions based on assumptions. Income, predicted sales, cost of goods sold, and expenses are evaluated when creating these statements ("Small Business Hub," 2016). A balance sheet shows what has been put into the company along with who has borrowed the track sheet by either an owner, investor, or supplier. The profit and loss account is a summary of business trading and profitability over a financial year.

Overall, these statements allow the business to make predictions. Each of these five documents represent different aspects of financial planning. All of these documents are essentially necessary when planning out business financial status and future status. In conclusion, each of these sections make up all the information needed to develop and complete a startup business plan.

2.2 Snails

2.2.1 Snail Farming

In this section, various activities are addressed regarding snail farming. It's important for HGF to understand the operations of the business, snail breeding process, snail disease, quality control, containment guidelines, health benefits of snails, and the snail market.

2.2.1.1 Farming Operations Supply Chain

An important topic to consider in the heliculture production is the supply chain. The production system entails the planting, breeding, harvesting, and transporting of snails to their respective consumers. The process begins with planting the first batch of snail eggs. Once they have reached their primal mating maturity, they are able to breed and lay more eggs; snails are then harvested at about 18 weeks ("Snail Life Cycle", 2017). At this stage, the farm can begin transporting the live snails to restaurants. Because HGF will only be selling locally, it does not have to purify and can the snails, like other international companies.

Similarly to lobsters, snails must be transported live to the restaurants to minimize the chance of food poisoning by cooking the snail live and also to maintain the freshness of the product ("Lobsters and Crabs Used for Food," n.d.). The purifying process begins with fasting the snails for 3 days and then purifying them by feeding them water and flour for the next week ("Snails as Food" n.d.). By putting this responsibility on the restaurant, it alleviates the work on the farm.

2.2.1.2 Operational Farm Practices

While running a farm, one is continuously searching for ways to improve the current operational system. According to Family Farms Group, they suggest to integrate systems like Lean, Six Sigma, Just in Time, or the Toyota Production System in order to evaluate the productivity and efficiency of the farm. These systems all help to eliminate wasting time and materials in order to make a farm run as effectively as possible (Glatt, n.d.).

The operational improvement is not the only managerial side to operations; there is also the employment aspect. As an individual, running a profitable farm is almost impossible. To combat this, Higher Ground Farm uses a volunteer system. Lynn Glatt, the Team Operations Manager from Family Farms Group, offers training for volunteering farms. These trainings specialize in the teachings of best farming practices, tactical suggestions for working with farm owners, how to incorporate waste removal methods, sharing best practices with other operations managers, and how to synthesize the operations. The trainings shape a strong and productive, volunteering farm (Glatt, n.d.).

2.2.1.3 Snail Breeding Overview

When applying operations knowledge to snail farming, *Helix Aspersa* anatomy is important to understand the process of breeding. Snails are hermaphrodites, having a male and female part and can breed with one another in order to lay eggs, but can also self-fertilize (Freeman, 2013).

According to the Garden Snail article, a mating session can last several hours. For snails to be able to breed with each other, they must be undisturbed from humans or other predatory organisms (Freeman, 2013). Snails are very sensitive to their environment; for this reason, the farmer should only maintain the snail containments by keeping the soil full of moisture, providing food and water, and removing any sick or dead snails (Freeman, 2013). Fully understanding the environmental components and standards of the snails should be the first step in deciding the practicality of farming to then obtain the permits.

2.2.1.3a Permits

To begin the snail breeding process, a PPQ 526 Plant Pest Permit needs to be obtained; this permit is required by the USDA for the importation or interstate movement of mollusks (USDA, 2016). The permit is granted based on two aspects: its hazard to the environment and the level of containment (USDA, 2016). An application online at usda.gov is used to receive the permit. It is then issued under the authority of 7 CFR 330 (USDA, 2016). It is illegal for live snails to be imported into the United States for human consumption (USDA, 2016). However, they can be shipped cooked, frozen, or processed. For the purpose of the snail farm, snails will have to be sourced within the country. This process includes acquiring the PPQ 526 and obtaining a written State Agricultural Official concurrence before a movement permit is issued (USDA, 2016). The snail farm will be inspected and approved if it follows the appropriate guidelines provided by the United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine, Containment Guidelines for Nonindigenous, Phytophagous Mollusks, which can be seen in Appendix C (USDA, 2016). In addition, there are also equipment and operational standards for the containment of snails that need to be followed in order to obtain the permit. Both can be seen in Appendix C.

As snails can easily escape their containments, the facility must be operated and closely monitored by a containment director (USDA, 2016). The responsibilities of this person are, but not limited to, implementing a standard operating procedure, training volunteers, updating blueprints of the facility, maintaining maintenance records, notifying PPQ of any changes or breach of containment, meeting all PPQ requirements and notifying PPQ if the containment operations is paused or ceased (USDA, 2016). In addition to these responsibilities, the containment director must also have an emergency contact list and an authorized personnel/trainee list.

2.2.1.3b Snail Breeding Process

Along with containment standards for breeding, there are additional specifications for when snails can breed. Snails must weigh at least 100-125g for breeding and should start at the beginning of a wet season, like spring. Under these conditions of "pairing and courtship" lasting anywhere from four to twelve hours, it will result in two snails exchanging sperm. After two weeks, anywhere from 80 or more eggs are laid into crevices in the topsoil from each snail. They are limited to laying six batches in a year, producing upwards to almost 500 eggs per year. In order to be eaten, young snails must mature for one to two years ("Garden Snail," 2014). Snails can be sourced from local agricultural institutes, which is a more reliable breeder. These types of snails may be more expensive but they are safer since they have been fed and handled properly.

Once the snails reach their mature age for sale, they can then be removed from their containment to be processed before being sold off. For the farm to be a fully functioning, profitable operation, the snails are closely monitored and managed by the caretaker in key stages of their life cycle: "egg laying, hatching, growing and maturity" (Freeman, 2013). This means ensuring the snails are healthy in each stage, consuming a proper diet, and that they are growing with strong shells. Stronger shells are the best contenders for breeding healthy snails, in addition to fecundity,

hatchability, establishment rate, and growth rate (Freeman, 2013). A benefit of stronger shell helps to fight off predators such as birds, ducks, lizards, frogs, worms, and other predatory insects ("Garden Snail," 2014).

2.2.1.3c Environment

Snails are influenced by their surrounding climates. Snail breeding occurs during the wet months of spring in the Northeast; this particular climate triggers snails to instinctively breed (Stephenson, 2011). During colder and drier weather, snails tend to retain moisture in the epiphragm, which is a thin mucus membrane under their shell. In order to survive extreme temperatures, the snails go through aestivation which can be thought of as a hibernation stage (Stephenson, 2011). During aestivation, snails can change their permeability to water, allowing them to survive for several months. This causes the snail to physically alter their osmotic components of their blood to survive extreme temperatures, a benefit for the cold winter temperatures they will endure. They are forced to "close their own shell aperture with a lid and inside the shell they withdraw, the resulting air cushions isolating them further against the cold" (Stephenson, 2011).

Soil composition is important for the development of a snail (Stephenson, 2011). The soil must cater to the snail based on the water content and texture because the soil is their whole environment (Stephenson, 2011). The calcium that a snail consumes comes not only from their diet, but also from the soil. As mentioned in the breeding section, a strong shell accounts for a healthy snail and a tool for fighting off predators. If the soil cannot support the snail's diet, it will stagger their growth (Stephenson, 2011). The water content of the soil also helps the snail to stay hydrated, and is a location for them to lay their eggs. The ideal soil is both full of moisture and high organic material. The soil needs to be loosened for the snails by tilling and lightly watered.

Lastly, the soil must be changed once every three months due to chemical changes, mucus, and droppings (Stephenson, 2011).

In relation to the farming operations, the environment needs to be considered for the system. As stated above, snails grow best in warm humid environments. It is important to look into a sprinkler system and as well as the Curtain Method to control the environment. This methods is a type of operational design to make the farm more efficient when overlooking and picking snails. The design of this structure has planks of wood lying horizontally across on top of vertical beams. If one walked into a snail containment, it would seem like really long tables with wide cracks between each beam of wood. Both surfaces allow for snails to rest horizontally or vertically. This technique is known to be the most efficient way of breeding snails without the hassle of lifting or bending to look over the snails and the stages they are at. It is also an effective way to maintain air circulation and decrease the probability of spreading diseases without affecting the snail's lively hoods ("Touchstone Snails," n.d.).

2.2.1.3d Diet and Feeding Habits

Snails have a wide range of feeding options due to their vegetarian diet (Freeman, 2013). They are restricted from any plants that might produce toxins or chemicals, and so they prefer tender plants when they are young. Young snails tend to eat twice as much as snails that are mature. As they mature, they start to eat more rotten fruit or fallen leaves (Freeman, 2013). Snails have a diet of carbohydrates, protein, and calcium that accounts for their high nutritional protein content when cooked (Avignina, 2012). The carbohydrates provide energy, the protein provides growth, and the calcium provides strength of their shells. For a healthy, balanced diet, snails should be well hydrated, eat leaves for protein, fruits for minerals and vitamins, and tubers, or root vegetables, for carbohydrates (Avignina, 2012). Their food must not contain salt. If the food is appetizing to the

snail, they will eat more, grow more quickly and therefore mature at a faster rate. For strong growth, powdered calcium from eggshells, limestone, wood-ash and oyster shells can be added to their food (Thompson, 2008). To keep them hydrated a shallow dish or water soaked sponge would be sufficient. A list of recommended food items supplementary items for garden snails can be seen in Appendix C.

2.2.1.4 Disease

The CDC and USDA have found that land snails often carry a parasitic worm inside them that can cause Schistosomiasis, which is an acute disease that can cause harm to different areas of the body. The African Giant snail has also been known, if not fully cleaned and properly prepared, to carry meningitis (Sellars, 2009). These diseases are big problems in areas where snails aren't cared for and properly cleaned. This is why snails need to be properly purified before being eaten (CureJoy, 2016).

2.2.1.5 Quality Control

All snails have to go through a "cleaning" process. Snails must be left in an open container in the sun for at least four days so they can be emptied and cleaned. Place the snails in a clean bucket of cool water and add salt and vinegar. The water will begin to turn white which mean the snails are being cleaned. Once the water turns completely white, wash out the bucket and repeat the process again. The once the water stops turning white, the batch will be cleaned and ready to be boiled and cooked. For distribution purposes, the snails should be carried in a Styrofoam cooler filled with ice until ready to be cooked (FAO, 1986).

2.2.1.6 Guidelines for Snail Containment

Snail containments must be suitable for the snails' needs. They have to be escape proof, as snails will wander around nearby gardens, eating crops that are not meant to be their feed

(Freeman, 2013). It must be spacious to support the snail and easily accessible so that workers may handle, clean and feed the snails (Freeman, 2013). If the snails are overcrowded in their facility, it will stagger their development and increase the risk of disease (Freeman, 2013). Snails are also prone to predators and need to be protected from them; chicken wire being the cheapest and best option (Freeman, 2013). The materials needed for containment are as follows: decay and termite resistant timber, galvanized sheets or polytheism sheets, cement blocks or mud bricks, chicken wire, mosquito nets or nylon mesh, and any second-hand materials like car tires, oil drums or water tanks (Freeman, 2013). *Figures 3* through 6 show four systems: hutch boxes, trench pens, minipaddock pens, and free-range pens used for snail farming are shown below (Freeman, 2013):

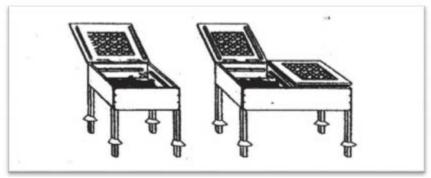


Figure 3 "Hutch box with single (left) and double (right) chamber"

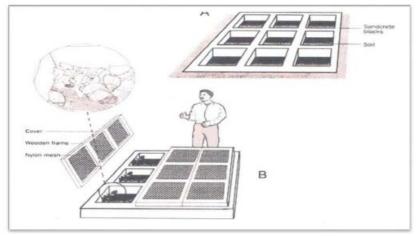


Figure 4 "Two types of trench pens. A: dug in trench pens. B: raised trench pens"

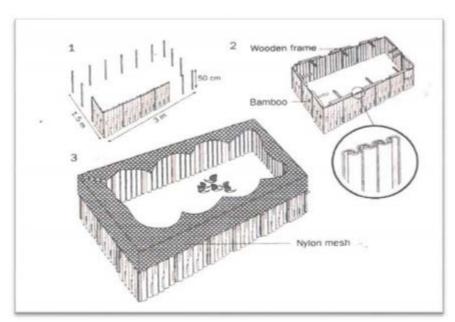


Figure 5 "Mini-paddock pen built with bamboo and nylon mesh"

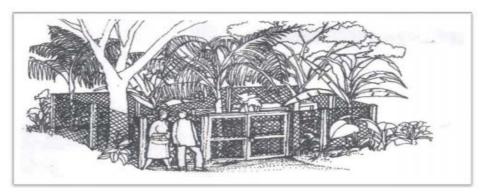


Figure 6 "Open free-range snail pen with vegetation providing shelter for snails"

Hutch boxes shown in the first figure are suitable as "hatchery and nursery pens because eggs and young snails can be easily located and observed (Freeman, 2013)." Trench pens shown in the second figure can be used as a "hatchery, nursery or fattening pens, with the number of stock being adapted to the size of the snails in each case (Freeman, 2013)." The snails can be moved from trench pens to a free-range pen once matured. Mini-paddock pens shown in the third figure provide an "environment resembling their natural habitat without much additional effort from the farmer (Freeman, 2013)." Free-range pens show in the fourth figure may serve as a "growing and

fattening pen for adult snails, which were raised through the egg hatchling-juvenile stages in hutch boxes or trench pens (Freeman, 2013)." These are four systems that can be considered when designing the snail containers.

2.2.2 Health Benefits of Snails

Humans have been eating snails for over 10,000 years as a source of protein along with their vegetables (Dasi-Espuig, 2014). Now, through scientific research, snails are becoming more important to human health. One of the most important vitamins found in all snails is Omega 3. This crucial vitamin is contains fats that help make the heart healthier and also preventing heart disease in young and old adults (Press Association, 2016). Omega 3 has also been proven to assist in developing the brain in young children as well as improving memory functions. Snail's Omega 3 also helps with eyesight, lowering cholesterol, healthier fetuses, and child development (DrHealthBenefits, 2016). Nutritionally, 100 grams, or 3.5 ounces, is about 90 calories and 16.5 grams of protein (Foodofy, 2015). Comparatively, 3.5 ounces of chicken has about 160 calories with about 31 grams of protein in it. Snails also have about 1.4-2 grams of fat in it versus 3-7 grams in a chicken breast (National Chicken Council, 2012). Because of this, snails are normally recommended as appetizers or small meals (Writer, 2017).

Snail farmers around the world have been seeing improvements from their skin when handling snail slime. Snail slime has known nutrients found in beauty products, hyaluronic acid, glycoprotein, proteoglycans, and antimicrobial and copper peptides. Snail mucin contains chemicals that help keep the skin from aging, which can be found in the local land snail (Maureen, 2016). The uses for snail slime have been known through historians, dating back to ancient Greece. Snail slime is now becoming a larger trend in US beauty care as well as a more preferable method to skin care (Pelletiere, 2014).

2.2.3 Marketing Snails in the Food Industry

Being able to market a product entails knowing the present market state, analyzing the different industries within the market, and developing a plan to immerse itself. This section discusses the background research for the current snail market and the particular industries that exist currently.

2.2.3.1 Snails Around the World

Snail consumption is most commonly found in European countries such as France, Greece, Italy, Spain, Portugal, and Germany. In the last couple of years, the snail market has expanded and become more popular in Great Britain along with the United States ("Snail Life Cycle," 2017). Historians have concluded that snail consumption has been common since prehistoric times (Snails as Food, n.d.). As time has evolved, different sectors of the world have created various customs for cooking and preparing the snails. The French are known for their escargot; the processes of extracting the snails out of their shells, cooking them, and then placing them back into their original shells with the traditional butter, garlic and parsley mixture. Greece and Italy mix the snails into different dishes such as sauces or various other pastas. It was not until the 1850's that the US had imported snails to the west coast (Snails as Food, n.d.). Many of the snail dishes presented in the American restaurants today, tend to be spin offs of European cuisine.

Interestingly enough, even though much of the consumption of snails is in France, Greece, Italy, Spain, Portugal, and Germany, snails are produced all over the European continent (see *Figure 7*). The French KPI website analyzed snail production and trade between 2013 and 2014, particularly in France. It concluded that most snails were produced in Greece and Turkey, rather than France due to cheaper labor in other countries. It will be interesting to observe if over time, snails will begin to mix in with more Greek and Turkish cuisine in the following years.

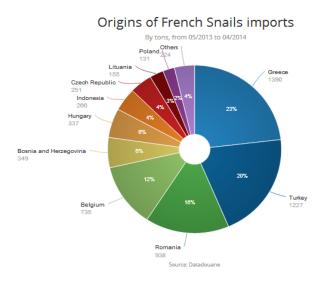


Figure 7 Origins of French Snail Imports

2.2.3.2 Local Food Movement

A driver for starting a snail farming business is the local food movement. Eating locally grown food differs by region and is based on climate, soil type and population; it means minimizing the distance between production and consumption (Peters et al., 2008). The motivation behind the phenomenon of eating organic and local foods is based on three characteristics: freshness, supporting the local economy, and knowing where the product came from (Food Marketing Institute, 2009). Farmers markets and community supported agriculture programs are on the rise now but years ago, celebrating local farmers and discovering regional variations were not as popular (Ganzler, 2013).

The local food movement has a heavy influence on the restaurant industry, from local cuisine menus to trendy and specialized meals (Coxall, 2014). A popular restaurant in Portland, Maine called Vinland Restaurant uses local ingredients only found in Maine (Spiegel, 2013). Their own Chef David Levi believes that the traditional industrial method of food produces "bad food" (Spiegel, 2013). By contributing to this food revolution, it is ultimately a step in the right direction

for a greater social, cultural and political revolution. In addition to restaurants using locally farmed food, there are several odd places used for farming: at a ball park in the Garden at AT&T Park in San Francisco, California, at a convention center in Chicago's McCormick Place in Chicago, Illinois, and on a rooftop in ABC Kitchen in Manhattan, New York (Ganzler, 2016). As we place a premium on locally grown food, it all represents a change in our collective thinking of where our food is actually grown.

There are endless benefits to eating local food including economic, environmental, social, mental, and physical benefits. In 2003, the Food Processing Center found that Americans purchase locally grown food based on the "higher/better quality and fresher products, positive relationships with producers, and the opportunity to purchase unique and special products (Food Processing Center, 2003)."

Over the last decade, Chef Dan Barber of Blue Hill at Stone Barns in Manhattan, New York has transformed the idea of eating local to an incredible dining experience. The 80-acre farm consists of animals, vegetables and minerals in Manhattan (Richman, 2014). Using the "123 sheep, 180 pigs, 700 turkeys, 100 geese, 6000 chickens, 1200 hens, 33 colonies of honeybees, 65 fruit and nut trees, six acres of vegetables, one acre each of grain, raspberries, and flowers, a 22,000-square-foot greenhouse, six pastures, four barns, two silos, and four tractors" Barber transforms those ingredients into unique dishes (Richman, 2014). Blue Hill implemented a concept called "fid-price menu including Grazing, Pecking, and Rooting" as its sole dining option where a variety of dishes are served with meat as the centerpiece. Through this method of combining local food with specialized recipes, it revolutionizes how customers thinking about eating. As places such as this one become more popular, the trend of chefs connecting food to the customer is becoming a staple in the restaurant industry. This will give way for initiating local foods such as snails into the

market.

The benefits of buying local are outlined below in *Table 2* (Brain, 2012):

Economic

- Direct sales from farmers to customers cuts out the middleman
- Farmers retain a larger amount of the cost and can be more sustainable
- More revenue remains in the local community
- Small business are the largest employer
- Restaurants and hospitals that advertise more local foods, attract more employees and patients
- Buying local increases national food security

Environmental

- Helps preserve local and small-scale farmland
- Reduces the distance food travels, cuts down on fossil fuel, air pollution, greenhouse gases
- Helps preserve cultivar genetic diversity
- Farmers engaged in direct marketing are more likely to use environmentally friendly practices

Mental and Physical

- Local food systems are linked to reduce food safety risks through production decentralization
- Eating locally is correlated with improved nutrition, healthier food choices, obesity prevention because it is overall less processed and much more fresh
- Growing your own local food will add healthy benefits and is proven to precipitate greater physical activity among all ages

Social

- Ability to gain insight into your food's story through talking with people who grew it
- Ability to ask about pesticides, herbicides, growth hormones, animal treatment and fertilizers
- Gives a stronger sense of place, relationships, trust, and pride within the community

3.0 Methodology

In this section we will cover the steps we took to address our objectives. The methods we have utilized are interviews, secondary research, and analytical tools.

3.1 Interviews with Prospective Customers

In order to determine the prospective market, we needed to clarify the potential customer segment for Mr. Stoddard and Higher Ground Farm (HGF). This information provided him with a customer profile, percentage of restaurants interested, an understanding of the competitive market, and possible business resources such as aggregators, associations, and possible collaborations.

We identified questions that would give us specific information that aligned with the Business Model Canvas. The following interview questions are listed below:

Interview Questions

- 1. How would you describe your customer demographics?
- 2. How do you reach your customers?
- 3. Are you part of a restaurant association?
- 4. What foods does your restaurant serve that makes you unique?
- 5. Do you regularly purchase locally grown products?
- 6. How often does the menu change?
- 7. Do you have any recommendations for other restaurants that source to local farms?

Table 3 Interview Questions

The goal was to contact twenty restaurants for interviews in both Boston and Worcester that fit the customer profile for HGF. The restaurants were organized in a spreadsheet to track data (found in Appendix B). We conducted interviews on-site and over the phone with two to four team members. All the interviews were recorded with permission from the interviewees. This allowed us to find real data from a variety of restaurant owners and managers. The interviews eliminated any assumptions and the need to do secondary research about snails in the restaurant industry.

After the ten interviews, teammates transcribed them and summarized the key takeaways. With this information attained, all the main points from the transcriptions were compiled into the results.

3.2 Design Analysis for Snail Containers

In order to have a snail farm, we needed to create a design plan for the snail structures. The purpose of having a well-thought out design was to create an environment for the snails to live in. To acquire the snail permit, we need to follow legal snail containment guidelines. Table 4 presents the questions we set out to answer, based on secondary research:

Research Questions

- What materials will be used in the design based on what we know?
- What will be the environmental controls in the design based on weather?
- How big will the structure be to fit on the rooftop?
- How much will the proposed design cost?
- What will the design look like?
- What technology will be integrated in the design?

Table 4 Research Questions for Development of Snail Containment Design

Information from existing structure designs was utilized to create a final design. This allowed us to implement sustainable practices such as using low-cost, organic materials. To see more of what recycled materials were available to us we visited Save That Stuff in Boston and took photos of what was available (found in Appendix D). We used secondary research from Mr. Stoddard's prior collaboration to go beyond our background research. Finally, we needed a design that was able to withstand the weather on the rooftop and ultimately keep the snail's life cycle

regulated under specific temperatures. We knew that the snails would be facing extreme temperatures on the rooftop, and we needed to integrate technology that would mimic the right temperatures. From these methods, we provided a design, a list of materials, and a cost analysis.

3.3 Analytical Tools

The purpose of the Business Model Canvas (BMC) and SWOT Analysis is to guide the development of the business plan by providing organized data and a framework for the snail business as a whole. This information provides Mr. Stoddard with the steps to create a successful business plan. The business plan is located in Appendix A.

3.3.1 Business Model Canvas

We used the BMC to help guide the team into structuring a plan that follows USDA regulations, Mr. Stoddard's vision of the farm, and our own vision to run a successful snail farming business. From our own background research and talking with Mr. Stoddard, we created a preliminary BMC to establish our own ideas in order to achieve the final goal of developing a profitable farm. To complete the BMC, the team met with Assistant Professor, Dr. Karla Mendoza-Abarca, to develop a final draft of a BMC that would act as the final roadmap for Mr. Stoddard to use.

3.3.2 SWOT Analysis

The SWOT analysis we completed, addressed the strengths, weaknesses, opportunities, and threats of HGF. This analysis determined HGF's position in the snail market and what decisions to make regarding products and services, distribution, promotion, and pricing. We were able to outline: HGF's key customers, how to utilize its strengths, and how to improve upon their weaknesses. The information needed to complete this analysis was collected through secondary research of the snail market, the local food movement, and an industry comparison. The key

takeaways concluded from the interviews conducted in the Boston and Worcester area restaurants, were also used in the SWOT analysis. The SWOT analysis can be found in Section 5.2.

4.0 Results

4.1 Identify and Understand the Prospective Market

Through extensive research and restaurant interviews, a market analysis was conducted to categorize the snail market in the following way. The following is a summary of all the pertinent information about the customer market and snail industry.

4.1.1 Customer Market

The potential customer market for Higher Ground Farm are higher class restaurants in the Worcester-Boston Area with the mission of purchasing locally grown food and upholding uniqueness in their industry. The following list is the customer profile that was created from Higher Ground Farm's Business Model Canvas and further developed through the restaurant interviews:

- Tourist/Local
- Eclectic Menu
- Identify with the local food movement
- Price Range
- Size of restaurant

Ten restaurants were interviewed and asked the same questions, each having its own brand, with the concluding question evaluating their interest in snails. A list of the interviewed restaurants, including their location, and what their interest in snails is can be found in *Table 5*.

Restaurant/Restaurant Group	Location	Interest in Snails?	
deadhorse hill	Worcester, MA	Yes	
The Sole/VIA/111 Chophouse	Worcester, MA	Yes	
The Bancroft	Boston, MA	No	
The Hourly	Boston, MA	Yes, already serve snails	
Garden Fresh	Worcester, MA	No	
Asta	Boston, MA	Yes, already serve snails	
Figs and Pigs	Worcester, MA	No	
The Boynton	Worcester, MA	No	
Armsby Abby	Worcester, MA	Yes	
The Niche Hospitality Group	Worcester, MA	Yes	

Table 5 Interviewed Restaurants' Snail Interests

HGF strives to main an eco-friendly self-sustainable farm. HGF helps preserve the local and small-scale farmland through its operations. This factor aids to the involvement in the local food movement. At our interviews, chefs and owners were asked if it mattered who they purchased their food from and many said yes. Many of the restaurants that were interviewed cared about the ethics behind the production of the products. For example, the Worcester restaurant, Armsby Abbey, said "How things are grown is very important, nutritional content is really important. We know who they are, what they're farming practices are, soil, different vegetables." Another Worcester restaurant, deadhorse hill said, "We make an effort to find the best ingredients but also to find local ingredients, so when chef has a day off, he's driving around the farms and talking to farmers, and doing all that kinds of stuff."

Cuisine in many of the restaurants are influenced by what is fresh, new food trends in the industry, and their effects on the environment and community. There are always food trends that influence the dishes at these restaurants; many dishes come and go as trends change. The Sole

Proprietor stated, when asked about snails, "Who knows, these things all have renaissance. What goes around comes around." Many of the restaurants interviewed stated that they strive to be creative with their dishes to enhance their own style and uniqueness of platters. The Worcester restaurant, the Sole Proprietor, stated that, "the main motivation is wanting to do something and to create a new item." HGF would strive to customize the snails to fit the restaurant through the unique breeding process of snails. When breeding snails, Mr. Stoddard would be able to change the diets of a batch so they can meet the specific flavors a customer wants or asks for. This type of customization will allow the restaurants to fit the foods they serve and please their customers.

Lastly, restaurants expressed a concern about being environmentally conscious. Armsby Abbey, stated, "... we try to keep [carbon footprint] as minimal as possible. We want to find the best products, finding locally is our biggest concern. It's not like it is here where we get the best ingredients and try to find something as close to home as possible." This is important to note because it assures that HGF's motivation to maintain an environmentally efficient business. This quality in HGF will be another future selling point for the business.

While conducting these interviews, it was clear that many of the values and key selling points of HGF are in line with their potential customers' needs. Over half of the restaurants were interested in purchasing snails, and even if they were not, many had correlating views on the importance of purchasing locally grown food, and being environmentally conscious.

4.1.2 Snail Industry

Over the years the snail industry has expanded from popular European countries to the United States. As time has evolved, different sectors of the world have created various customs for cooking and preparing the snails. This makes this industry very unique and uncommon in the food industry.

4.1.2.1 Demand and Competitors

Although this may be a low demand industry, HGF could focus in specialization in the customer market. This kind of industry gives a business a lot of potential for growth because there are less competitors. With less competitors in the area, HGF can become one of the main distributors of snails in the United States. Many customers that do purchase snails, import canned snails from France. There is not a fresh snail farm in the Boston and Worcester area for potential customers to purchase from. The closest farm restaurants can purchase snails from is a farm in Long Island, NY. This is not a convenient location for those that want fresh snails instead of canned snails. Canned snails do not align with the request of freshness from the restaurants.

4.1.2.2 Local Food Trends

The local food movement has had a heavy influence in the restaurant industry. This movement is a fast growing trend. The movement has countless environmental, community, and health benefits. People are now more willing to eat new alternatives that not only benefit their health but also help their community. Snails could be labeled as an exotic food but if willing to try it, there are many health benefits in the food. Snails' main competitor in the restaurant industry is the traditional protein and high nutritional sources. The traditional options are chicken, beef, and fish. *Table 6* shows a nutritional comparison between snails and the traditional meat choices.

Snails	Chicken	Beef	Fish	
100-gram serving (3.5oz)	100-gram serving (3.5oz)	100-gram serving (3.5oz)	100-gram serving (3.5oz)	
90 Calories	110 calories	288 calories	240 calories	
16.5 grams of protein	29.55 grams of protein	26.33 grams of protein	19 grams of protein	
3.5 mg of iron	1.33 mg of iron	44.55 mg of iron	0.3 mg of iron	
1.4 grams of fat	7.72 grams of fat	19.54 grams of fat	14.53 grams of fat	

Table 6 Comparison of Protein Alternatives

4.1.2.3 Barriers

When entering any industry there are barriers that can obstruct the path. A few barriers that HGF could encounter are limited transportation, halt to the demand of snails, and the proper breeding process of snails. As stated in section 2.2.1.3a Permits, there are many permits and regulations related to this organism. A limited transportation system could occur due to a possible conflict in the regulations for the transportation of live snails. This could be conquered by staying up to date with all permits and regulations. Next, in any industry there is the fear of zero demand for the product. This can be maintained by the continuation of networking, outreach, and quality of product for the restaurants. And lastly, from our first meeting with Mr. Stoddard at HGF, he expressed one of his main concerns was how to begin the breeding process of snails on a rooftop farm in New England. Snails have a very specific breeding temperature that can be hard to manage

without the proper equipment. The ideal temperatures for snails are between 55°F and 75°F, making it difficult to farm on a rooftop.

4.1.3 Key Connections

Just like any business, having partners can make life much easier on owners, shareholders, and workers within the business. For Mr. Stoddard's case, finding a connection like "Lettuce Be Local" or "Massachusetts Restaurant Association" can help him with distributing his produce across the state and even across New England. These partners open doorways to help him network with restaurants as well as other farmers in the area that share the same philosophy.

4.2 Containment Designs for Snails

HGF will need to choose from a few design options for the snail containment boxes based on three top priorities: 1) efficient environment for breeding, feeding, and maturing, 2) a range of technology use and cost, and 3) overall materials to build the containment. We chose a basic design that can either become more expensive by increasing the technology or less expense by replacing store-bought items with recycled materials. Out of the four designs we researched: hutch boxes, trench pens, mini-paddock pens, and free-range pens, we chose hutch boxes. This design is suitable as "hatchery and nursery pens because eggs and young snails can be easily located and observed unto maturity (Freeman, 2013)."

4.2.1 Snail Containment Environment

The environmental conditions for the snails should abide by the following suggestions (Murphy, 2001):

- The soil of the growing out area is prepared in the same manner as a nursery
- Snails are placed in this area will ideally need to have attained a weight of between 3 to 5 grams, although they can be put into an area at a weight of 1 grams

- Recommended density of young snails are between 250 to 350 snails per square meter
- If overcrowded, the growth rate of the snails will slow down and can cause health problems
- A timing system to control and monitor the watering /sprinkler systems

The soil they feed and grow in needs to be changed on a regular basis in order to keep the snails healthy; once every three months is sufficient (Stephenson, 2011). It needs to be full of moisture, which would suggest a watering system; this will be discussed in the technology section.

4.2.2 Environmental Controls and Spacing Requirements

The ideal design for a snail containment would be a closed system facility which needs to be escape proof such as the hutch box (Thompson, 1996). These are the only acceptable designs due to regulation agencies. Snails must thrive in their own natural environment, and if they escape they will threatened by weather conditions and predators (Thompson, 1996). The design will focus on structural consideration, water circulation, humidity, drainage, and maintenance (Thompson, 1996). For spacing requirements, European heliculturists recommend 100 adult snails per square meter for sufficient space to thrive. In overcrowded conditions, snails will have limited reproducibility and a lowered lifespan.

4.2.3 Temperature

To have successful containment of snails, the area outside needs to include the proper temperatures and vegetation for the snails to grow and reproduce before being killed. Snails generally prefer to live in areas of a temperature between 55°F and 75°F (Murphy, 2001). A snail living in temperatures below that will begin a "shutdown" process that will eventually lead to death. In order to keep them alive, John would need to purchase a heating and cooling system powerful enough to set a temperature and have it regulate through the entire containment area for long periods of time. This will be discussed in the technology section.

4.2.4 Insulation

Thermal insulation is important for the intense temperatures the snails would face. This table of materials shows the best insulation materials for the snails. The higher number of the lampda, the higher the thermal conductivity. This table shows the best insulator to be lightweight concrete (Block and Bokalders, 2010):

Insulator material	W/mK (lampda) Thermal
Cotton	0.04
Calcium Silicate	0.045
Cellular glass boards	0.042
Cellular plastic (xps, polystyrene)	0.036
<u>Cellulose fibre</u>	0.04
Sheeps wool	0.04
Straw	0.07
<u>Hemp</u>	0.038
Woodshavings	0.06
Flax fibre	0.04
<u>Lightweight concrete</u>	0.1

Table 7 Material thermal conductivity

4.2.5 Technology

A low technology and low cost containment design can be considered. Materials to be considered low cost are car tires, or oil drums/water tanks. These materials are not only cheaper than higher technology use materials but they can be efficient tools in the breeding process of snails. Three or four tires can be placed on top of one another to create the framework of the containment (Murphy, 2001). Snails have the ability to escape through small spaces so to prevent

this, chicken wire and mosquito mesh can be put between the topmost tire and second to the top tire. This will not only keep the snails in but will also create a steady ventilation system and will create a better system for harvesting. Lastly, the oil drums or water tanks should have holes in the bottom in order to allow drainage. They should be filled with soil to a depth of 7-10 cm for the breeding process. We visited the recycling center in Boston, MA near HGF called "Save That Stuff" to find out what materials were available on hand. We spoke with Erik about varying materials and toured the site. We were able to find many materials and since Mr. Stoddard has a friendly relationship with Erik, he may be able to get more materials that will fit with the snail designs. All pricing is done individually for items. An example of recycled items can be found below in *Figures 8*, and remaining photos can be found in Appendix D.





Figure 8 Recycled Items

A high technology driven snail farm that can be a choice for HGF. As mentioned in the environment section, temperature control is important in the snail production. There are many different heating and cooling systems in the market and depending on the area, can cost over

\$10,000 (FarmTek, 2016). Snails also require certain humidity to for the environment throughout the day and also at night. A sprinkler or mist system would be the best way to keep humidity high inside a snail farm house during the day and higher at night. These automatic systems can be about \$32 (mrdrip, 2016). An electric humidifier sensor would allow automatic recognition if humidity is too low and would allow the sprinklers to activate. A weather system implanted into the snail farm will give the best reading on the weather and humidity for the snails and the plants in the farm, which can run up to about \$200 (AcuRite, 2016).

4.2.6 Materials

The design of the containment could include the following specific materials as seen in *Figures 9-17* (Thompson, 1996 and Freeman, 2013):

• Galvanized chicken wire



Figure 9 Galvanized Chicken Wire

 Hardware cloth within a closing wooden (decay and termite resistant timber), metal or plastic framework to provide aeration containment and pest exclusion



Figure 10 Metal Framework

• As mentioned in the section above, any recycled materials like car tires, oil drums or water tanks can be used in place of wood



Figure 11 Recycled Materials

• At least 2 inches of accessible soil for egg production



Figure 12 Soil

• Raised bed table garden box, 48"lx24"wx36"h



Figure 13 Raised Bed

• Lightweight concrete, trowel and tub for insulation



Figure 14 Concrete Insulation Illustration

Hygrometer for humidity



Highly Accuracte Hygrometer DTM-550

Figure 15 Hygrometer

• Mist System



Figure 16 Mist System

• Moisture meter



Figure 17 Moisture Meter

4.2.6.1 Cost

Chicken Wire 36" x 300"	\$16.78 at Walmart
Raised Box	\$229 at Potted Store
Hammer	\$4.98 at Home Depot
Nails	\$9.87 at Home Depot
Lightweight Concrete, Trowel & Tub (pictured above)	\$32.79 at Home Depot
Soil	\$1 per 40 lbs at Home Depot
Mist System	\$70 at Mr. Drip
Humidity Temperature Meter HH310-SW	\$61 at Omega
Niagara Soil Moisture Meter N2167	\$6.99 at eBay

Table 8 Cost of Products

At this rate it would cost Mr. Stoddard approximately \$500 for one snail bed and for each additional bed it would cost him \$300.

5.0 Analysis

5.1 Business Model Canvas Analysis

5.1.1 Introduction

The Business Model Canvas (BMC) Analysis will consist of all the basic aspects for a business startup. These aspects include the financials, partnerships, operations, customers, and other important topics to consider when establishing a solid baseline for a business. This analysis is tailored to Higher Ground Farm (HGF) and its snail farm. Below (*Figure 18*) is the completed Business Model Canvas for Higher Ground Farm.

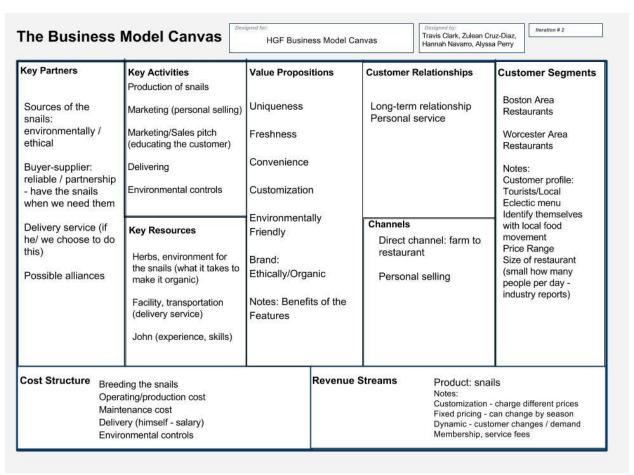


Figure 18 Higher Ground Farm Business Model Canvas

5.1.2 Customer Segment

The customer segment of the Business Model Canvas (BMC) helps establish who our most important customers will be and where they are located (Section 2.1.1). For Mr. Stoddard, his key customers will be restaurants located in Boston and Worcester, MA. These cities have a large amount of people in and around the area that help develop the customer profile. Boston and Worcester both consist of tourists and several local business workers and the accompanying restaurants that serve them vary in size. The restaurants that we targeted seemed to share values and needs that revolve around healthy eating and local farming. From Boston restaurant, The Bancroft, Richard, the owner, explained that they source their meats and vegetables from a small local farm where the "chefs get to select what goes in the ground then harvest that. In the heat of it in August, harvest is happening every day." The chefs understand that the market for a more healthy eating style requires them to purchase more foods that are produced by farms and farmers around the area. Because of this, Mr. Stoddard will be able to sell products to those chefs who want to follow the local and organic food movements.

From the location of HGF, the source for customers will be Boston and Worcester, MA. These two major cities in Massachusetts are locations for those looking to eat organic foods from local farms. According to Yelp.com, Boston and Worcester have about 872 restaurants that title themselves as organic restaurants; these are possible restaurants that fit the customer criteria for HGF and can be potential customers in the future (Yelp, n.d.).

5.1.3 Value Proposition

The value proposition answers the questions, "What value do we deliver to the customer?", "Which one of our customers problems are helping to solve?", and "What bundles of products and services are we offering each customer segment?" (Section 2.1.1) To answer these questions, we

proceeded with a deep analysis of Mr. Stoddard's business, including direct contact with him as well as our own research for HGF. Together, we determined the core values of the snail business would be as listed:

- Uniqueness
- Freshness
- Convenience
- Customization
- Environmentally Friendly
- Having an Ethically and Organically Run Farm

These value-driven characteristics represent Mr. Stoddard's vision for his farm. What makes his business stand out more than any other snail business will be his ability to bring a unique food product that is made fresh and organically, making it more attractive than his competitor, canned snail manufactures. His location also plays a factor because restaurants will receive his product quickly and whenever they become available. He would be able to keep in close contact with his customers. From the interviews we conducted, we asked many chefs and owners if it matters who they purchase from; overwhelmingly, every restaurant said yes, it does matter. They are looking for locally grown products with great nutritional value, like at the Worcester restaurant, Armsby Abbey, they said "How things are grown is very important, nutritional content is really important. We know who they are, what they're farming practices are, soil, different vegetables." and deadhorse hill said, "We make an effort to find the best ingredients but also to find local ingredients, so when chef has a day off, he's driving around the farms and talking to farmers, and doing all that kinds of stuff." HGF's current and future customers want to use fresh, organically

grown foods that they know are ethically raised. By purchasing our product, they know that all of HGF's products are locally raised and will satisfy the restaurant's needs.

5.1.4 Customer Relationship

Our goal is to develop large, long-term relationships with consumers. Through interviews, we learned that restaurants value customer loyalty and personal relationships. The Sole Proprietor discussed their long-term customers saying, "We will be 38 years here in the next couple of weeks, so a lot of our customers that started with us as younger people, you know, are now in their 50's, 60's, and beyond." Having these relationships with their customers shows how necessary this is to their business. This is the same with the restaurant Figs and Pigs, where the owner, Candace Murphy, stated that she has person conversations with every single one of her customers. This shows the need for personal interaction. Once HGF can accomplish having long standing customers and personal relationships with them, Mr. Stoddard can keep his business running successfully. To accomplish long-term relationships with customers, HGF will follow their core values and bring a personal experience to customers. He can accomplish this by having regular conversations with restaurant owners, managers and staff. He can promote his brand by having a personalized online ordering system to order HGF's snails and other products. This will help gain long term relationships with restaurants and allow him to expand his network.

5.1.5 Channels

Currently Mr. Stoddard's delivery practices are environmentally friendly because he delivers on a bike. While reducing carbon emissions, Mr. Stoddard is also reducing the distance food travels, cutting down on fossil fuel, air pollution, and greenhouse gases. Mr. Stoddard wants to deliver his product in a timely fashion in order to maintain greater customer relationships. From background research discussing the local food movement (Section 2.2.3.2) and interviews of

restaurants, most chefs and managers get their products by pick-up truck delivery since they source locally. The products are delivered directly to their door where the chefs and managers decide where to store it in the kitchen. Mr. Stoddard will focus on transporting the product directly to the customer. If he chooses to deliver and quality check the product himself, this allows the restaurant to give him feedback in person. It will also end up being the most cost efficient way for Mr. Stoddard to deliver his product. When Mr. Stoddard is working his business, he is building customer relationships and creating a network. This personal touch to his business puts him above and beyond ordering snails from a can online and will ultimately bring in more revenue.

5.1.6 Revenue Streams

HGF's revenue stream is directly connected to the profits from selling snails. Currently, the only snails available for our customers are canned snails. Mr. Stoddard wants to sell his live snails for \$50 per pound. After reviewing the IQP (Grilla et al, 2016), it appears that HGF's customer demographic is willing to pay up to \$50 per pound for live, locally grown snails.

Another pricing strategy would involve HGF pricing their snails differently depending on the season and how well the farm did. Demand will affect pricing; an advantage to a self-run farm is the option to change the prices like a Community Supported Agriculture (CSA) program (NC State, n.d.). If there is a high demand for snails during one month, HGF has the flexibility to customize the price. This flexibility allows for the farm to charge different prices for different amounts of snails sold, unlike their canning competitors. Additionally, HGF can charge delivery fees and an advanced herb-flavored snail. The selling of snails will significantly raise the revenue stream for HGF.

5.1.7 Key Partners

HGF will look for reliable suppliers and partners that have similar views about being environmentally conscious as well as withhold high ethical standards for snails. Our key partners are the live snail provider, Snails in the Mail, aggregators in the region, and restaurant associations. Specifically, a few of prospective partners that could be considered are Mass Restaurant Association, Central Mass Restaurant Association and Lettuce Be Local, a local aggregator. If Mr. Stoddard decided to expand his business he might need to take into consideration partnering with these various restaurant associations and/or an aggregator. The current delivery service Mr. Stoddard is using is transportation by bicycle. If he decides to expand farther than his current Boston limit, he might find use of an aggregator or another delivery service that would be considered an additional key partner.

Our key supplier for our breeding snails is Snails in the Mail, a snail breeding company. The buyer- supplier relationship for HGF is a reliable partnership. When our customers need snails, we will have them ready. From interviews with Mr. Stoddard it is clear that this relationship with Snails in the Mail has begun. To expand it, he can include Snails in the Mail on his website for free marketing and be a repeating customer by purchasing both the snails and snail food.

5.1.8 Key Activities

The key activities are required to deliver the company's value proposition. These activities will aid to the distribution channels, customer relationships, and revenue streams of Higher Ground Farm. The key activities determined for HGF are the production of snails, marketing through personal selling, marketing sales pitch, delivering services, and the environmental controls in the snail containments.

The production of snails includes building containment structures, and purchasing, breeding, growing and maintaining snails. This will be carried out successfully by Mr. Stoddard following snail care instruction manuals, controlling their environment by integrating technology and ensuring that the snails are healthy and disease-free. Marketing the snails will consist of Mr. Stoddard building relationships with local restaurants and making connections with them. This will be successful when he has established his brand in the restaurant industry. Restaurants will trust his product and be willing to refer him to their associations or networks. Delivering the snails will be an important opportunity for Mr. Stoddard to have face-to-face interactions with customers, and if he were to outsource he would have to choose a delivery service that is capable of supporting and spreading awareness of his brand.

The production of snails aims to generate the revenue goal. It is clear that the production of snails is what would make the company successful; without the steps to create the product, there is no product. Marketing through personal selling accomplishes the personal relationships HGF strives to have with all the potential customers; to maintain a loyal and reliable relationship. Developing a marketing sales pitch not only gives the company the ability to make and sell itself, but also educates the customer on the type of products that are offered. It is crucial to align with HGFs value proposition, key partners, etc. by being environmentally friendly and delivering the product on time. These specific services allow for a constant business.

5.1.9 Key Resources

The key resources of a company tie together all the other factors; without the resources a company cannot perform. This portion of the BMC questions who HGF's key partners and suppliers are along with what key resources are acquired from partners and what activities do these

partners perform. The following key resources for HGF were determined based on what would make a successful performing company:

- Herbs/feeding for snails
- Environment for the snails
- Facility
- Transportation
- Mr. Stoddard farmer

In order to make the product organic, HGF will focus on herbs/feed for snails and a specific environment without conventional pesticides. The snails must be maintained in a safe and healthy environment; they will be protected from predators in an escape-proof containment structure. The facility will follow the snail containment guidelines and can ensure that the snail farm will be operated properly. The farm operations and transportation methods aid to the delivery service of the business; these two resources will be the responsibility of Mr. Stoddard. He is the main resource for anything farm related; he has all the necessary skills and extensive experience for the farming business. To be successful these resources will aid to help with the key activities, support customer relationships, and increase revenue streams.

5.1.10 Cost Structure

The most important cost inherent in our business model is the production expenses; the snails will be living in structures designed with various materials. Keeping the snails alive during the extreme weather conditions will cost money to heat and cool their environment. The soil always needs to be full of moisture so they will require a sprinkler system. Since the snails will initially be bought from Snails in the Mail, it is certainly more expensive to purchase these live snails when beginning to breed. These activities altogether will pay off in the future but each step to take care

of the snails has a price. The snail is the product we are looking to sell so they are the most important priority.

The key resources that could up being the most expensive are transportation. Currently, Mr. Stoddard transports his products on a bicycle which is free but if the distance of the restaurants are too far from the farm, he might consider contracting a distributor or acquiring an aggregator. Thus would require Mr. Stoddard to increase production in order to afford it. The best option would be to stay local and transport the snails himself by bicycle; this also maintains his brand and keeps the process environmentally friendly.

Our business will be cost driven; depending on the leanest cost structure, lowering production costs over time and using more recycled material over time. Mr. Stoddard can also contact supermarkets and acquire "ugly fruit" which was mentioned by Niche Hospitality's chef, Steve Champagne. He discussed that "food waste like a supermarket, wastes 50% of their food, they call it ugly fruit and vegetables now, like everything has to be pretty to sit on the shelf and 50% of that is dented, but they still taste the same. So I've actually reached out to a couple of our vendors to say can I get the ugly fruit?" By acquiring free produce, Mr. Stoddard can provide snail food at zero cost. Sustainable methods like this one promote HGF's brand and reduces waste.

5.1.11 Conclusion

The BMC was used as an analytical tool to create the framework to start up a small Snail Farm business in Boston. It provided guidance and the structure for the development of the business plan.

5.2 SWOT Analysis

The SWOT analysis consists of all the prospective strengths, weaknesses, opportunities, and threats of HGF. These were determined based on background and secondary research,

interviews and continuous communication with Mr. Stoddard. The analysis can be seen in the figure below:

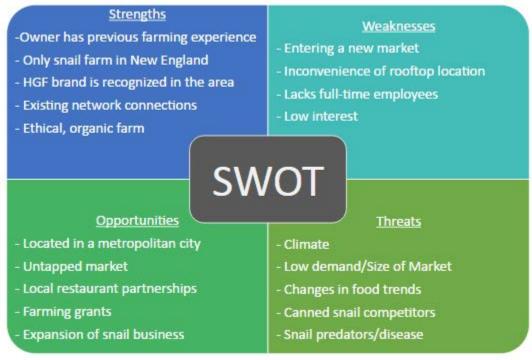


Figure 19 Higher Ground Farm SWOT Analysis

5.2.1 Strengths

We have determined five core strengths of HGF. Our first point is the experience Mr. Stoddard has in healthy eating, waste management and farming. As seen from his résumé in the business plan appendix (Appendix A), Mr. Stoddard has been involved in the environmentally friendly market for many years. His expertise will help him grow healthy, organic products in addition to properly managing the snail waste. Next, is that HGF is an environmentally, organic friendly and ethically run farm. As stated above, Mr. Stoddard has experience in this field which will aid to the success of breeding and selling the snails. HGF is already a known farming company in Boston due to his continuous stream of volunteers in and around the area. Mr. Stoddard has developed a great network with the local population and HGF has had a positive impact on the

community. He has the ability to expand from his existing contacts who will enable him to sell a new product in the market. Lastly, Mr. Stoddard has the advantage of being the only snail farmer in New England. Due to this, HGF will be a direct, fresh snail producer in the New England region.

5.2.2 Weaknesses

Like many small businesses, HGF is entering a market that already consists of competitors. This is a weakness because HGF is a small business that will be competing with other snail farms as well as large snail manufactures. HGF also lacks full time employees to fully operate the farm. Mr. Stoddard is currently the only full time employee while also working a second full time job. Due to the lack of profitability, people looking for positions may not be interested to work for free at a farm that does not do very well financially. Lastly, HGF is located in a different and inconvenient location, a rooftop. The rooftop makes operating the farm difficult because of the need to move any necessary supplies with elevators, requiring more manpower and time. The inconvenience could be a key factor when searching for workers, as well as an increased cost when transporting heavy loads on an external elevator lift.

5.2.3 Opportunities

As mentioned before, the snail market is a niche market with a low demand. Luckily, the market is undiscovered. When evaluating restaurants that have never sold snails before it became clear they are willing to explore the idea. This is an opportunity for future growth within the restaurant market. Since HGF is located in such a vibrant city like Boston, finding local restaurants seeking a new source of protein is attainable. Mr. Stoddard has taken out a lease on the Boston Design Center roof; this use of space can allow for more snail beds to expand production and profit. The Beginning Farmers Network in Massachusetts provides grants and resources to farmers

that can ultimately be another source of funding to expand the HGF brand and developing the snail farm

5.2.4 Threats

HGF's location can be affected by the changes in climate and could make breeding snails a challenge. Snails can only live at specific temperatures (55°- 75° F) and the weather in New England is always changing. Mr. Stoddard could eventually encounter difficulties raising snails year round because of this. HGF can run into problems regarding the demand of snails because of the influence of food trends in the food industry. If the food trends contribute to the unattractiveness of snails, the demand for snails will be low and Mr. Stoddard will not be able to sell the necessary amount to keep the business afloat. The market for snails in the U.S. is currently small. From research and interviews done, snails are not a popular type of food to eat. To some Americans, snails are unappealing and are considered pests. Because interest in snails is low in the U.S., the demand for it is also very low. This can have a negative effect on the ability for the farm to keep functioning after a few years if the demand remains low. Finally, the snail market has been dominated by canned snail suppliers that are able to transport their products everywhere around the world. Since these companies are large producers of snails, they have the ability to lower their costs in comparison to HGF.

5.2.5 Conclusion

The SWOT analysis allows for pros and cons of the business to be evaluated. Utilizing the Likert Scale, we gave values to the categories such as customers, market, brand, location, interest, management, and financial (*Table 9*). Strengths and opportunities were placed on the left under "Pros" and weaknesses and threats were placed under "Cons." Each aspect and category was rated from 1-10 with 1 being not at all important and 10 being extremely important based on the Likert

Scale Response Anchors (Vagias, 2006). The calculated percentage represents the net total of the pros being a positive values and cons being a negative values, divided by the total categorical value. From the percentage, we concluded that it is a risky venture for HGF. This is due to the fact that it is a small business entering a new market with a low demand and interest. The positive, yet low percentage, reflects that this business could be successful with an uncertain outcome. These values are based on our background knowledge and could fluctuate from the real results.

Pros	Likert Scale	Cons	Likert Scale	Categories	Value
Owner has previous farming	8	Entering a new market	-10	Customers	8
Only snail farm in New England	10	Inconvenience of rooftop location	-4	Market	10
HGF brand is recognized in the are	5	Lacks full-time employees	-7	Brand	8
Existing network connections	9	Size of snail market in U.S.	-8	Location	5
Ethical, organic farm	6	Low interest	-8	Interest	7
Located in a metropolitan city	6	Climate	-2	Management	7
Untapped market	10	Low demand	-8	Financial	4
Local restaurant partnerships	7	Changes in food trends	-6	Total	49
Farming grants	4	Canned snail competitors	-3		
Expansion of snail business	3	Snail predators/disease	-2		
Total	68	Total	-58		
	Net	10			
	Percentage	20%			

Table 9 Likert Scale for HGF Snail Business

6.0 Recommendations

6.1 Marketing

1. HGF should develop marketing strategies by targeting local sourcing restaurants and improving its website.

Our background research (Section 2.0), interviews (Appendix B), and the IQP team research from last year showed tremendous trends of restaurants wanting and looking to switch to a more organically driven menu. These new restaurant environments fit the target for Mr. Stoddard to sell his product to and because of his location in Boston, selling to Boston and Worcester areas can be done easily. Our results (Section 4.1) shows that there are restaurants wanting to purchase snails from around the area which is a good opportunity for Mr. Stoddard to start selling snails. Mr. Stoddard currently has a website in place for him to use and market his product out to the public. In order to keep public interest in HGF, we recommend that Mr. Stoddard update his website with ingredients being sold, a social media page and a volunteer page. We also believe that it would be a good idea to have the ability to order online by the use of a credit card or PayPal.

2. For future endeavors, HGF should connect with aggregators and approach new markets.

As of right now, Mr. Stoddard is at a manageable point in his business to personally deliver all his product to his customers personally. As his business continues to grow, the management of customers could potentially become overwhelming or too much to handle. If this occurs, we advise HGF to work with an aggregator. By doing this, it will not only take a burden off the farm, but it will additionally expand its sales into new markets and

transport the snails for them; a cost he could eliminate. Mr. Stoddard could potentially also look into different snail markets like selling a snail facial kit or producing snail caviar.

6.2 Operations

1. HGF should start the snail farm with ten containment structures and focus on environmental controls.

Based on the financial plan (Appendix A) for the design of the snail containment structures, the revenue needs to outweigh the startup and operating costs. The calculations show that HGF can break-even after the first year by starting off with ten structures. In order to effectively produce enough snails in the structures, it is important to control the environment by integrating technology; this would mean providing a mist system and a heating/cooling system for each snail bed to ensure they develop and mature properly.

2. HGF should prioritize environmentally friendly practices by using recycled products and minimizing waste.

In the Boston and Worcester area there are systems within supermarkets to reduce the waste in the local area. Supermarkets, if contacted, will give restaurants their "ugly fruit" to use in their dishes. Because HGF aims to be environmentally sustainable, Mr. Stoddard should contact supermarkets and acquire the produce that seems unappealing to consumers. Another sustainable method that can be used is implementing a composting system to reuse the soil from the snail beds after they have been changed. By acquiring this free produce and composting the used soil from the snail beds, Mr. Stoddard can provide snail food at zero cost, promote HGF's brand, and reduce waste.

3. HGF should continue the volunteer program to help care for the snails.

Starting up and maintaining a snail farm is a challenging task. It is almost impossible for only one person to run an entire profitable snail farm alone. If Mr. Stoddard does follow our suggestion of starting off with ten beds (25 snails in each), they will produce 100,000 snails by the following year. In addition, snails require year-round maintenance, very different than seasonal vegetables. In order to keep up with the volume of snails produced, the uptake of the farm, and the collection process, we suggest for HGF to continue his volunteering program to get free help on his farm; this will inevitably help with his low cost start up budget.

6.3 Financials

1. Snails should be sold at a price of at least \$50 per pound; this price can be modified with customization of the product.

The price of at least \$50 per pound is Boston restaurants are willing to pay (Grilla et al, 2016). HGF values uniqueness and can add herb-flavored snails to their inventory; this would allow the pricing of the snails to be modified. By customizing the snail flavor, this allows HGF to fit the product with a variety of restaurant styles. When breeding snails, HGF would be able to change the diets of a batch so they can meet the specific flavors a customer requests.

2. HGF should apply for a grant from Beginning Farmer Network (BFN) of Massachusetts.

There are several financial resources through BFN Mass that can be found on their website. For experienced farmers, there are resources that HGF can take advantage of such as: grant opportunities, land access, farm infrastructure, risk management, business planning, livestock processing, and organic certification. There are grants that are valued up to

\$25,000 that could help HGF secure funds to start the snail farming business (BFN Mass, 2017).

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Business Plan for Higher Ground Snail Farm

March 2017

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Appendix AA

Appendix BB

1.0 Executive Summary

Higher Ground Farm (HGF) is a rooftop farm located in Boston, MA. Mr. John Stoddard is the owner and founder of HGF. The goal is to create a profitable farm for organically grown, ethically raised garden snails (*Helix Aspersa*). HGF will offer quality snails by implementing environmentally friendly practices in raising its snails. The snails will be available to restaurants in Boston and Worcester with the mission of serving locally grown food. HGF will be looking to target medium to high-end restaurants that value environmentally friendly businesses, uniqueness in the service, convenience of location, and customization of the product.

Currently, HGF will be the only supplier of fresh snails in the New England area. From interviews and background research, there is potential for growth within the snail market. The growth is influenced by the local food movement and up and coming food trends. 70% of locally sourcing restaurants have shown to be interested in purchasing snails for future menu additions. If HGF grows sales by 7.5% each year, it will be profitable after three years of business. If the snails are sold for \$50 per pound, this will provide a profit after three years.

This business plan will provide a company overview, a detailed description of the products and services of HGF, an in depth marketing plan analyzing the snail industry to present strategies for HGF to successfully enter the industry, an operational plan that includes the running of the snail farm, materials for the farm, a description of the snail containment, and the legal requirements for the business, a description of the management and organization of HGF, and a detailed financial plan providing the necessary financial statements projecting the next three years.

2.0 Company Description

Higher Ground Farm (HGF) is a commercial rooftop farm located on the Boston Design Center in the Seaport District of Boston; it is owned and co-founded by Mr. John Stoddard. HGF grows greens, herbs, tomatoes, and other vegetables for sale to Boston restaurants and directly to the community through Boston food markets and a farm stand in the lobby of the Boston Design Center. Their mission is "Higher Ground Farm's addition to the local food market will increase access to fresh, healthy food in Boston, and contribute to the overall sustainability of the food system." With a B.S. in Environmental Studies and a M.S. in Nutrition with concentration in Sustainable Food and Agriculture Policy (Appendix AA), Mr. Stoddard gained knowledge of growing healthy organic food. HGF is launching a new venture to expand the brand: a snail farm. Since HGF will be the only snail farm in New England, their location in a major city allows more accessibility to customers. The objective of HGF will be to address: 1) creating a sustainable farm, 2) following the company mission, and 3) expanding our customer network and annual sales.

3.0 Products & Services

HGF would be allowing a fresh, organic version of *Helix Aspersa* snails to be sold in the restaurant market as escargot that is healthier and more natural than its competitors. It will provide customers with a refreshing and exotic meal that they cannot experience anywhere else because the locally grown snails will be the first of their kind to be grown in New England. HGF's snails will be guaranteed to be safe, clean, and treated ethically. They will be packaged in fishnet bags so they are aerated. The high quality of the snails and the option of herb-flavored snails is a competitive advantage; this sets our product line. This would mean cleansing the snails and feeding them specific spices like basil or parsley once they are to be sold.

Currently in New England, there are no existing competitors. Canned snails already exist in the restaurant market; these snails are shipped internationally and are not fresh. Most restaurants that carry snails on their menu are receiving the Burgundian snails from France. To our knowledge,

¹ Higher ground farm. (2013). Retrieved from http://www.highergroundrooftopfarm.com/

the closest supplier of fresh snails is located in Long Island, NY. To remain a competitor, we are choosing to sell snails at \$50 per pound; this is what Boston restaurants are willing to pay.²

4.0 Marketing Plan

Higher Ground Farm conducted a market analysis to identify and categorize the potential snail market. The following is a summary of all the pertinent information about the potential customer target, snail industry trends, and snail market factors.

4.1 Industry Analysis

Type of Industry	Snail Industry
Common Traits of the Industry	Canned snails by international delivery
Size of the Industry	In a study conducted by Touchstone Snail Technologies, in the year 2014, the total worldwide industry consumption of snails was estimated to be around 450,000 tons and has now reached 12 billion dollars. ³
Trends in the Industry	"USA is increasingly turning to this product because it is a characteristic of the Mediterranean cuisine – diet and because it is consistent with the dietary fashion." Many countries in the Mediterranean area are being described to be going through a "nutritional transition" (CIHEAM/FAO, 2015) In the chart below (<i>Figure 1</i>), food trends in the U.S. can be seen based on what customers are looking for in their food. The chart also displays what the sales for that health category is and what the projected percent change is in a 52-week period.

² Grilla, A., LaJeunesse, C., McMaster, D., & Morgan, D. (2016). Feasibility of Snail Farming as a Model for Small Urban Farms to Expand into Niche Markets for Increased Profitability [Scholarly project]. Retrieved from https://web.wpi.edu/Pubs/E-project/Available/E-project-032416-160443/unrestricted/Higher Ground Farm Snail IOP2016 pdf

project/Available/E-project- 032416-160443/unrestricted/HigherGroundFarmSnailIQP2016.pdf ³ Touchstone Snails. (2015). Snail market - discovering viability of snail farming. Retrieved from http://touchstonesnailfranchise.com/snail-market/

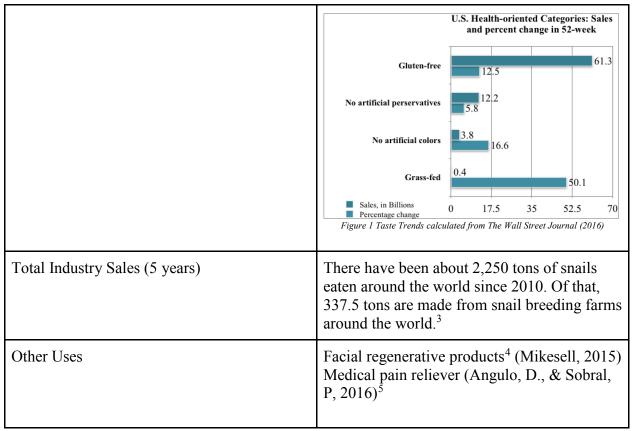


Table 1 Snail Industry Analysis

4.2 Target Customer

Our primary customer segment for Higher Ground Farm are upscale restaurants in the Boston-Worcester Area with the mission of purchasing locally grown food. Our target customers fit this profile:

- Restaurant clientele include tourists and locals in the area
- Eclectic Menu
- Identify with the local food movement
- Price Range: Medium (\$20) to High (\$70)
- Size of restaurant: Medium (~25 tables) to Large (~40 tables)

⁴ Mikesell, H. Fab or Fad Facials. (April, 2015). *American Spa*. Retrieved October 03, 2016, from http://www.americanspa.com/treatments/fab-or-fad-facials

⁵ Angulo, D., & Sobral, P. (2016). Characterization of gelatin/chitosan scaffold blended with aloe vera and snail mucus for biomedical purpose. *International Journal of Biological Macromolecules*, 92, 645-653. doi:10.1016/j.ijbiomac.2016.07.029

Table 2 shows the percentage of restaurants that fit the customer profile in the Boston and Worcester area. 6 It shows that the potential size of the customer segment is 18.4% of the Boston and Worcester restaurants.

	Boston Area	Worcester
Number of Restaurants	2,141	398
Percentage of High-Mid Dining Restaurants	~150 restaurants - 7%	~26 restaurants - 6.5%
Percentage of Restaurants locally purchasing.	~85 restaurants - 3.9%	~4 restaurants - 1%

Table 2 Restaurants that fit the customer profile in the Boston and Worcester Area

Through the ten restaurant interviews, a few key factors were concluded. The main ideas derived from these interviews are the restaurant's interest in snails, when and why their menu changes, what restaurant associations they are a part of, if they participate in chef collaboration, and if they purchase produce for an aggregator. It became clear that 60% of the interviewees are interested in purchasing snails for their restaurants. Summarized below are the main ideas determined from the ten interviews of the Boston and Worcester area restaurants that will aid to the evaluation of the customer needs (*Table 3*).

10

⁶ EAT Massachusetts; (2017). Retrieved from http://www.massvacation.com/eat

Restaurant/Restaurant Group	Location	Interest in Snails	Menu Details	Restaurant Associations/Collab oration	Aggregator
deadhorse hill	Worcester, MA	Yes	Daily changes	None	Lettuce Be Local
The Sole/VIA/111 Chophouse	Worcester, MA	Yes	Seasonal changes	Mass Restaurant Association	Lettuce Be Local
The Bancroft	Boston, MA	No	2-month cycle	Mass Restaurant Association	None
The Hourly	Boston, MA	Yes, already serve snails	Standard Menu	Mass Restaurant Association	None
Garden Fresh	Worcester, MA	No	Standard Menu	None	None
Asta	Boston, MA	Yes, already serve snails	2-week cycle	None	None
Figs and Pigs	Worcester, MA	No	Seasonal changes	Central Mass Restaurant Association	Lettuce Be Local
The Boynton	Worcester, MA	No	Standard Menu	None	None
Armsby Abbey	Worcester, MA	Yes	Seasonal changes	Chef collaboration	Lettuce Be Local
The Niche Hospitality Group	Worcester, MA	Yes	Food trend changes	Within group collaboration	Local farm purchases

Table 3 Main ideas collected from the ten interviews conducted

HGF will aim to meet the customer's needs; the customer needs are categorized into four sections: environmentally friendly, uniqueness, convenience, and customization of product. This

value propositions fits into the need because customers are looking to have local, organic food, something new and different, and a product that is easily accessible and adaptable to different restaurant styles.

1. Environmentally Friendly

Most of our target customer requires and maintain an environmentally conscious business. The need for these products follow their values. For this reason, HGF strives to maintain an eco-friendly self-sustainable farm. Our farm helps preserve the local and small-scale farmland through its operations. This factor aids to customers who are involved in the local food movement. The farming operations are engaged in direct marketing and follow environmentally friendly practices. From the ten restaurants interviewed, 70% stated that it matters who they purchase from. The importance of environmentally friendly farms and ethically produced products is key for the customers.

2. Uniqueness

Out of the ten restaurants in the Boston-Worcester area interviewed, seven stated that they strive to be diverse with their dishes. These restaurants also responded that on average, their menus change every two weeks and continuously looking for new dish inspirations. HGF can deliver a unique product, snails, to these restaurants that want to have a new dish served to their customers. This different flavor can attract new customers to their restaurant.

3. Convenience

Customers are willing to pay for convenience too, therefore, we will strive to maintain a close and local relationship with customers. In relation to our competitors, restaurants have to wait for their snail shipment to arrive; if customers can have their fresh products delivered right to them

on their own time, then their need for convenience will be met. The restaurant market range in relation to the location of the farm, would be to the convenience of the restaurant.

4. Customization

From the ten interviews of the Boston-Worcester area restaurants, it was concluded that 70% of the restaurants strive in their style of cooking and uniqueness of their platters. Our farm would strive to customize the snails to fit the restaurant. When breeding snails, we would be able to change the diets of a batch so they can meet the specific flavors a customer wants or asks for.

4.3 Market Factors

4.3.1 Food Trends

The trends in the food industry can easily influence the demand of snails such as the local food movement that has enhanced the healthy food fad in the country. Restaurants have begun to purchase more locally because of the need to be healthy and stay current with the local food trend. This movement increases the demand of snails because of the need for healthy protein alternatives. Many people are following the local food movement because of the phenomenon of eating organic and local foods is based on three characteristics: freshness, supporting the local economy, and knowing where the product came from.⁷

4.3.2 Competitors

Many customers that do purchase snails, import canned snails from other countries. Below are two graphs displaying the main regions of supply exports and the countries snails are imported from (*Figure 2*).

⁷ Food Marketing Institute. (2009). U.S. Grocery Shopper Trends. Food Marketing Institute: Arlington, VA.

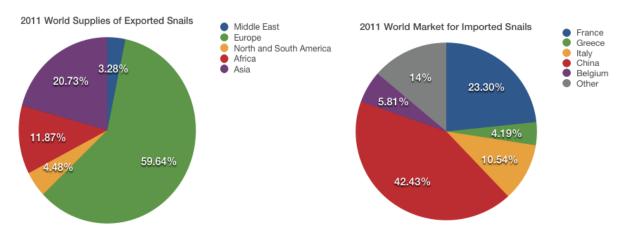


Figure 2 Adapted from Touchstone Snails study conducted in 2011

Canned snails can be purchased at multiple times during the year because the process is different than the fresh/organic one HGF is aiming for. To be eaten, snails must mature for one to two years. Snails would be harvested depending on their breeding process rate making them a seasonal product. Seasonal product farming can also affect the restaurant's menu depending on what time of the year it is. The seven out of ten restaurants, on average have a menu change every two weeks depending on what foods are in season. However, there is not a fresh snail farm in the Boston-Worcester area for potential customers to purchase from, the closest farm restaurants can purchase snail from is a farm in Long Island. This factor makes HGF the only fresh snail farm in New England. With less competitors in the area, HGF has the opportunity to become one of the main distributor of snails in the United States.

The main competitor in the restaurant industry is the traditional protein and high nutritional sources. Snails are not the first choice for restaurants when deciding what proteins to purchase for their dishes. Chicken, beef, and fish are the traditional protein selections. *Table 4* shows a nutritional comparison between snails and the traditional meat choices.

Snails	Chicken	Beef	Fish
100-gram serving (3.5oz)	100-gram serving (3.5oz)	100-gram serving (3.5oz)	100-gram serving (3.5oz)
90 Calories	110 calories 288 calories		240 calories
16.5 grams of protein	29.55 grams of protein	26.33 grams of protein	19 grams of protein
3.5 mg of iron	1.33 mg of iron	44.55 mg of iron	0.3 mg of iron
1.4 grams of fat	7.72 grams of fat	19.54 grams of fat	14.53 grams of fat

Table 4 Compare and Contrast of Nutritional facts

From the comparison table it can be clear that snails can be used in place of the traditional meat choices. The snails nutritional facts aid to the customers need for a healthy alternative. Snails are low in calories and fat than all the other choices. This can be used a competitive advantage by advertising the higher nutritional values of snails in comparison to other animals.

4.3.3 Pricing Effects

Maintain a fixed cost for the product that is in the range of pricing in the snail industry; in comparison to purchasing canned snails. Currently, the price per pound HGF chose is \$50 based on the Financial Plan data. The break-even table shown in Appendix BB shows that selling them for \$50 will allow HGF to break-even after year 3.

4.4 Promotion Strategy

The image of a fresh, healthy, and organic product is what HGF hopes to promote in the current industry. The hope is for HGF to develop a personal, reliable, and growing snail business. Promotion will be aimed to target the customer values that align with the value proposition of HGF. The use of personal service to develop the customer relationship will provide HGF will a

loyal customer base. The following channels are the best ways to reach our customers because the industry is so new in the United States; these kinds of channels are the best way to get our image out there.

4.4.1 Channels

1. Word of mouth

 a. Personal service for the customers includes face to face interactions and personalized sales and marketing.

2 Media

a. We will develop a helpful website that will allow customers to find the company online and to keep current customers aware of any news and the products available. This website will be linked to several local food aggregator programs in order to expand the customer pool.

3. Networking

- Utilize the restaurant alliances that the potential customers are already a part of.
 This will be used to market Higher Ground Farm as a local food supplier.
- b. Existing relationships can be expanded by the continuation of networking, outreach, and quality of product for the restaurants.

5.0 Operational Plan

The operational plan consists of topics such as, how a snail farm is run, the materials needed, a description of the design, and any legal requirements. This section covers the behind the scenes steps to assure the farm runs smoothly without forgetting an essential step.

5.1 Production of Snails

Breeding

HGF is acquiring its snails from a breeder, Snails in the Mail. Once HGF has the first batch of 25 snails from this breeder, snail breeding can begin. The breeding process for a snail begins with the laying of eggs on soft tilled soil in a humid environment. Once the new set of snails have grown and matured, they are then harvested at around a year and ready for purchase. The figure below (*Figure 3*) is an example of the breeding process.

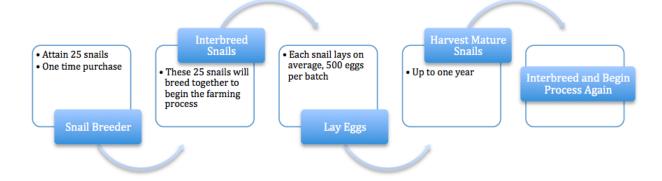


Figure 3 HGF's Beginning Snail Breeding Process

Materials

In order to start up a rooftop snail farm, our company went through a selection process for the materials necessary to develop a snail containment. These materials include: chicken wire, a raised box, hammers, nails, concrete, soil, a mist system, a humidity temperature meter and a soil moisture meter. The pricing and other specifics can be found in the Financial Plan section below.

We aim to attain most of the materials through recycling centers, such as "Save That Stuff" or resale businesses. The lower the prices of our materials, the better our profit margins will be. In addition, we stand to be as environmentally friendly as possible. Our greenhouse gas footprint reduces dramatically by using a good quality, used material, rather than buying a brand new one for a higher price.

Storage

To store snails before their transport to our customers, the only requirements are air circulation, temperature maintenance, and a safe space where they will not be crushed or eaten by predators. As long as the live snails have fresh air, are at acceptable and controlled temperatures (between 55°-75° F), and out of harm's way, they will be in good shape. HGF wants to provide the freshest product possible, to do this, it is best to only keep these creatures in their mesh-net packaging for one- two days since they will not have access to food or water between the time of harvesting and selling.

Production Operations

The timeline for bringing snails to the market is beginning with first acquiring the permitting of the snails, building the snail containment and then finding a snail farmer to purchase healthy snails to breed and then sell. We are seeking to start this process in the summer of 2017 with a few snail containment structures. *Figure 4* shows the milestones and timeline for HGF in its first year.



Figure 4 HGF Milestones

The goal is to make operating costs low enough to make a profit. As they take around 1-2 years to mature, we must ensure that the snails remain healthy and well-fed until maturity. Although managing the snail's way of life is an investment of time, it is crucial to have customers

that would be willing to purchase these snails. We have a snail supplier to begin the breeding, but once the healthy snails are able to breed, we will be able to produce them with knowledge of how to care for the snail and how to market the snail to customers. A detailed list of the necessary cost of materials for the full breeding process can be found in Section 6.0.

5.2 Business Management

Sales

To avoid the hibernation stage and keep them from becoming a seasonal product, snails will have a controlled climate. Snails can produce up to five batches of 500 eggs per year. We want to take advantage of this production rate and farm snails year around.

Business Dealings

The farm will be run during the daytime. It will open early in the morning to get weekday deliveries to our customers before they open. The farm hours will only run until the early afternoon since most of the work will be completed in the morning. Deliveries will be completed three times per week to keep up with all our orders in town. As for business expenses (rent, maintenance, utilities, insurance, and other initial costs), they are all discussed further in our Financial Section 7.0.

Delivery

HGF is an environmentally conscious farm; this entails the delivery of the product. HGF will continue to use a bicycle to deliver products within Boston. This method has been beneficial for personal communication with the customer as well as abiding to the initial goal of being environmentally conscious. To deliver beyond Boston, an aggregator would be an environmentally friendly alternative.

5.3 Legal Requirements

The first step for running the snail farm is to acquire a PPQ 526 Permit that allows for the transportation of snails over state lines and a liability insurance; these will be crucial for the growth of HGF. The PPQ 526 Permit is granted to entities that transport pests that required some kind of containment and that could be a hazard to the environment. This permit takes at least 30 days to acquire and does not expire for at least 3 years.

To be able to attain this permit, a written State Agricultural Official concurrence is required, the snail farm must be inspected and approved by the following entity guidelines: United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine, Containment Guidelines for Nonindigenous, and Phytophagous Mollusks.⁸ In addition, there is also equipment and operational standards for the containment of snails that need to be followed in order to obtain the permit. Both can be seen in Appendix C of MQP report.

The next is paying for liability insurance. As a food provider we are responsible for any snail that might cause harm to a restaurant's business. For this reason, we need insurance to cover us on the off chance this might occur. This is a very low probability but it is very essential to regulate the snails and make sure none are sick or carrying any harmful diseases.

6.0 Management & Organization

6.1 Company Ownership

Mr. Stoddard will have full control over all operations within HGF as the sole proprietor of the company. This responsibility will include different areas within business functions including sales, marketing, management, operations and hiring. Mr. Stoddard will also be responsible for day to day operations until sales exceed his operational costs.

⁸ United States Department of Agriculture. (n.d). Alternative Farming Systems Information Center. Retrieved from https://www.nal.usda.gov/afsic/snails#snailpermit

HGF will rely on services of volunteers and other associations to help get work done around the farm. He currently has active support from volunteers but not the amount of money to hire people full time. Once sales on the farm increase, he will require more people to help maintain the farm. The most important positions to hire volunteers or workers will be to aid with the operations of the farm. As soon as HGF receives enough capital from sales, we can expand, hire more people and assign specific tasks for them.

HGF would also be interested in getting together with other small business associations within the area of Massachusetts. These groups can help provide more insight on how to properly manage farms for different foods. These new contacts can also lead to investment opportunities for HGF and possible partnerships to help manage the farm.

If Mr. Stoddard were to decide to leave the HGF, the farm will be up for sale once the lease on the roof of the Boston Design Center concluded.

6.2 Previous Experience

Mr. Stoddard has had a lot of experience dealing with environmentally friendly techniques as well as proper ways to deal with foods and vegetables. Previously, Mr. Stoddard has held multiple positions revolving around clean recycling around the country. He has worked as a water waste reduction specialist, bringing organic landfill waste like paper and food into composting facilities as well as monitoring residential recycling. He has also been an organic separation program specialist which included creating a system to properly recycle organic wastes into composting areas from public school kitchens and cafeterias and educating the local population about the importance of recycling organic waste. Working with the company Healthy Food, Mr. Stoddard has worked both as a program specialist, consulting local establishments to use organic and human foods, and as a care coordinator, working with health sectors across New England to

increase the purchasing of organic foods within healthcare facilities. Mr. Stoddard employment history as well as experience can be found in his résumé can be found in (Appendix AA).

7.0 Financial Plan

7.1 Important Assumptions

Assuming costs for our company, Higher Ground Farm will be applying for a farming grant to cover the following costs (*Table 5*):

Material Expenses	Cost	
Chicken Wire	\$16.78 per pack (at Walmart)	
Raised Box	\$229 each (at Potted Store)	
Hammer	\$4.98 each (at Home Depot)	
Nails	\$9.78 per pack (at Home Depot)	
Lightweight Concrete, Trowel & Tub	\$32.79 per set (at Home Depot)	
Soil	\$1.69 per 40 lbs (at Home Depot)	
Mist System	\$70 each (at Mr. Drip)	
Humidity Temperature Meter	\$61 each (at Omega)	
Soil Moisture Meter	\$6.99 each (at eBay)	
Free Range Pen	\$384.61 (at Wayfair Riverstone Industries)	
Operating Expenses	Cost	
PPQ 526 Permit	\$70 one time, lasting three years (USDA)	
Rent	\$24,000 per year (based on 10 yr. lease)	
Utilities	\$12,000 per year (on average in Boston)	
Liability Insurance	\$500 per year (on average for small businesses)	
Labor	\$0 (based on volunteers)	

Breeding Snails	\$400 (at Snails in the Mail)
Snail Feed	\$24.99 for 500g (at Snail in the Mail)
Packaging Snails	\$9.29 per 100 bags (at Webstaurant Store)

Table 5 Material and Operating Expenses

Based on the restaurants interviewed, 70% of them were interested in purchasing snails. If this continues to be a trend across all of the locally sourcing restaurants in the Boston and Worcester areas, we can assume that 70% of them will purchase snails, which is 7 restaurants. Of these 7 restaurants they would have to purchase approximately 12 pounds of snails per month, which is approximately 120 orders of escargot per month or 30 orders per week. This would allow for the full 100,000 snails to be sold for profit. The market will purchase these snails because they are interested in being unique, serving fresh ingredients and supporting local farm. Relative to the industry analysis, the growth rate of our sales will raise based on snails being produced all over the world. Once a trend takes hold in this area, customers can expect to snails on the menu as a regular occurrence. We can also assume that the change in costs of materials can be a factor, and strategies to reduce costs should always be a priority.

7.2 Key Financial Indicators

Higher Ground Farm will be expecting to break-even after three years. Startup expenses will equal approximately \$39,870.00 and sales revenue is expected to equal approximately \$40,000, assuming the snails are priced at \$50 per pound. The table below briefly outlines the number of beds to start off with in the first year, the price of the first bed and materials and the additional cost of each bed, the number of snails each bed will need to start with, and the potential to breed the specified number of snails. The first bed includes the initial cost of the one-time materials such as the hammer, nails, chicken wire, soil and lightweight concrete, tub and trowel. Each additional bed will include the bed itself and the systems outlined in the table. The average snail lays 86 eggs per cycle and has an average of five reproductive cycles a year, each individual

snail can lay 430 eggs a year. Assuming all the snails that are produced are sold, each bed would produce approximately 10,000 snails for a total yearly revenue of \$50,000. Depending on the maturity rate of the snails, these snails can be ready to sell in as little as year (*Table 6*).

Beds	Price of Bed Breeding Snails S		Snails Produced
1	\$500	25 snails	10,000
2	\$300	25 snails	10,000
3	\$300	25 snails	10,000
4	\$300	25 snails	10,000
5	\$300	25 snails	10,000
6	\$300	25 snails	10,000
7	\$300	25 snails	10,000
8	\$300	25 snails	10,000
9	\$300	25 snails	10,000
10	\$300	25 snails	10,000
Total	\$2,300	250 snails	100,000 snails

Table 6 Bed Numbers and Production

7.3 Explanation of Break-even Analysis

The break-even point shows how much sales are needed to cover the cost of expenses per unit. After that amount of sales is attained, the sales exceed the expenses and HGF will begin to make a profit. The break-even analysis shows that HGF would need to sell approximately 102 pounds which would generate \$5,118.11 per month to break-even in the first year. This is assuming snails will be sold at \$50 per pound, the cost of the goods sold are \$18.25 per pound and the monthly operating costs are \$3,250. The break-even point equals fixed costs divided by sales price per unit minus variable cost per unit calculated in the table which can be seen in the Appendix BB. Since we are projecting to sell approximately 83 pounds, we would actually be losing money in the first year. However, after three years, we would be projecting to break-even based on the increase of two snail containment structures and a free-range pen to be able to hold and produce more snails for future growth in sales. If customization of the product becomes an option, snails could be priced higher in the future and increase sales within the first three years. The implications of the break-even point for HGF shows that after three years, HGF

will be successful.

Assuming that the restaurants we interviewed actually purchased the snails grown, there is a capacity for HGF to go beyond those restaurants to grow their target customers. Reducing costs and increasing sales will have a positive impact on the business.

7.4 Explanation of Projected Profit and Loss

The profit and loss statement calculates three years of potential income and can be found in Appendix BB. It reflects \$50,000 in sales which is 1,000 pounds of snails. The cost to produce each pound is \$18.25 and therefore equals \$18,250 in direct cost of sales for the year. We included the operations costs: depreciation, rent, utilities, and insurance for a total of \$38,540. Commonly in startup businesses, net profit is negative at first and by year three is successful if they break-even. Shown in the statement, HGF is projected to make -8% in profit margin, which is a net loss of \$4,071.21. After three years of business, HGF is projected to have a positive net profit of \$1,472.14. We increased sales each year for an average of 7.5% by adding only one additional containment structure for \$300 each per subsequent year. This means that cash sales will go up to 53,750.00 in year 2 and 57,750.00 in year 3. Consequently, the direct cost of sales will also go up. Profit will go up approximately \$2,000 each year. The only other recommended, one-time expense is a free-range pen that will cost \$384.61; this cost can be lowered by building a free-range structure out of recycled materials.

7.5 Explanation of Projected Cash Flow

The key elements of the pro forma cash flow statement present changes in cash balances for three years. Assuming that HGF acquires a \$10,000 farming grant from Beginning Farmers Network of Massachusetts, and sales hit the projection of \$50,000, the only additional cash will be sales tax of \$3,125 in year 1, \$3,359.38 in year 2, and \$3,609.38 in year 3. Total expenditures

will equal \$56,790.00 in year 1, \$57,886.25 in year 2 and \$59,086.25 in year 3. Then when we add additional cash spent, which includes the free-range pen, net cash flow equals -\$5,190.24 in year 1, -\$2,003.05 in year 2, and \$955.70 in year 3. Since we are assuming we receive the grant, we will use \$6,000 in the first year and save the last \$4,000 for the second year; this would be two separate installments to ensure profitability over the three years. The cash balance for each year will be 809.76 in year 1, 1,996.95 in year 2, and 955.70 in year 3.

7.6 Explanation of Projected Balance Sheet

The balance sheet includes three years of calculations reflecting the assets, liabilities and capital. Since HGF is not planning to take out any loans or buy on credit, there are no liabilities. The assets are equal to \$28,634.61 in year 1, \$19,618.75 in year 2, and \$21,078.75 in year 3. The long-term assets which will include the snail containment structures remain at \$2,300 for the first year but their value will depreciate over time. The net worth of HGF will be \$30,934.61 in year 1, \$21,458.75 in year 2, and \$\$22,458.75 in year 3. If HGF were to receive any investments, they would be added to this particular statement. Since the grant is included in year 1, the highest net worth will be year 1; however, after that year the net worth will be decreased and then increase every year after that.

7.7 Explanation of Long-term Plan

The long-term financial projections for HGF are to eventually earn a steady profit and grow sales every year. With the help of the grant, HGF will accrue zero debt. In order to obtain a profit, HGF will have to sell all of the snails produced. Operating costs can be reduced by replacing snail food with leftover produce from groceries or restaurants, incorporating more recycled materials as the farm grows. In three years, HGF will be successfully selling and producing snails that can then be applied to other industries such as health and beauty, medicine and even pets. Each year by

increasing advertising strategies and joining networks and collaborations, HGF should grow sales by at least 7.5% each year to make a profit, and can do this by increasing their customers. The product line can expect to grow by adding herb-flavored snails and snail caviar. If the business does not prosper within the three years, then HGF can be sold off to an investor or another farmer. However, with the many resources available, failure does not seem evident.

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JOHN LEE STODDARD

EDUCATION

Tufts University

Boston, MA

Master of Science in Nutrition

Concentration in Sustainable Food and Agriculture Policy

University of Vermont

Burlington, VT

Bachelor of Science in Environmental Studies

- Concentration in Environmental Education
- Dean's List

EMPLOYMENT

2012present

Healthy Food in Health Care Coordinator

Health Care Without Harm, Boston, MA

- Works with healthcare sector in New England and supply chain representatives to increase purchases of sustainably produced foods within healthcare facilities.
- Represents the health care sector in farm-to-institution efforts across New England: participates in Farm to Institution New England meetings, CT Governor's Council for Agricultural Development, and Rhode Island Food Policy Council
- Manages two state workgroups focused on increasing health care sector purchases of local and sustainable foods.
- Collects data on local and sustainable food purchasing by administering surveys and providing tracking tools for in-hospital use.
- Creates resources for hospitals such as case studies, policy guidance, and tracking tools.
- Performs grant writing and funding-related activities.

2010present

Higher Ground Farm Founder

Higher Ground Farm, Boston, MA

- Founder and operator of Boston-based urban agriculture company, which utilizes rooftops and other urban spaces to sustainably, grow food for sale to Boston-area residents and restaurants.
- Performs all tasks related to business including business plan development, building markets, and securing start-up funds.

2007-2009 Healthy Food in Health Care Program Specialist Health Care Without Harm, Boston, MA

- Provided consultation to Boston hospitals to increase use of local and organic and humane foods in hospital cafeterias, and to reduce use of polystyrene food service ware.
- Coordinated with vendors and hospital purchasing departments to address supply chain issues related to purchasing humane and sustainably produced foods.
- Facilitated interdepartmental collaboration to develop effective recycling programs.
- Promoted green initiatives to hospital staff members, and surveyed staff for feedback on initiatives.

2005-2007

Program Assistant

Oregon Center for Environmental Health Portland, OR

- Worked with region's healthcare systems to improve environmental sustainability in their operations
- Facilitated working-groups of diverse stakeholders to address supply chain issues in purchasing humane and sustainable foods
- Managed Biobased Service Ware and Composting program for six area health systems, and successfully eliminated the use of polystyrene service ware, thereby reducing landfill-bound waste.
- Lead researcher and co-author of web-based Sustainable Food Policy Guide, www.sustainablefoodpolicy.org

2002-2003 Organics Separation Program Specialist

Portland Public Schools, Portland, OR

- Developed and monitored organic waste (food and non-recyclable paper) separation program for diversion to composting in 40 public school cafeterias and kitchens.
- Designed and created education materials.
- Educated students and staff.
- Set up program infrastructure in cafeterias and kitchens.

2001-2002 Waste Reduction Specialist

Chittenden Solid Waste District, Williston, VT

- Co-directed pilot program designed to divert residential organic waste (food, paper, & yard waste) from landfills to a regional composting facility.
- Conducted research for an internal report on residential organic waste collection programs
- Monitored residential recycling compliance.
- Created informational and educational flyers and brochures.
- Answered Waste Reduction Hotline, responding to questions from businesses and residences regarding recycling, composting, hazardous waste disposal, and trash disposal.

PROFESSIONAL DEVELOPMENT

Round the Bend Farm Intern

Worked as Assistant Farm Manager for the 2010 growing season engaging in all farm duties and chores including: feeding pigs and chickens; rotational grazing of cows, sheep, and goats; installing fencing; plant propagation and harvesting; and producing value added products.

Master Urban Gardeners Training

 Completed 40-hour training covering organic plant propagation, pest management, garden design, and soil and water management.

Master's Independent Study: Protecting Food and Farming Security: Preparing Massachusetts Farmers for Climate Change

 Prepared a report for the Massachusetts Department of Agricultural Resources on climate change's impact of food security for Massachusetts residents, and how increasing temperatures may provide an opportunity for MA farmers to meet shortfalls in food supply.

Bachelor's Senior Thesis Project: Collecting Leftovers

• Created an instructional guide to assist communities in implementing a municipal residential composting program.

Higher Ground Farm				
Startup Table				
For 2017				
Startup Requirements				
Startup Expenses				
Legal	70.00			
Total Startup Expenses	70.00			
Startup Assets				
Cash Required	0.00			
Startup Inventory	0.00			
Other Current Assets	0.00			
Long-term Assets	2,300.00			
Total Assets	2,300.00			
Total Requirements	2,370.00			

Higher Ground Farm				
Break-even Analysis Table For 2017				
Break-even Analy	<u>ysis</u>			
Monthly Units Br	eak-Even	102.3622047		
Monthly Revenue	e Break-Even	5,118.11		
Assumptions:				
Average Per-Unit	Revenue	50.00		
Average Per-Unit	Variable Cost	18.25		
Estimated Month	ly Fixed Cost	3,250.00		

Higher Grour			
Pro Forma Profit and			
For 2017-2	2019		
	Year 1	Year 2	Year 3
Sales	50,000.00	53,750.00	57,750.00
Direct Cost of Sales	18,250.00	19,618.75	21,078.75
Other Cost of Sales	0.00	0.00	0.00
Total Cost of Sales	18,250.00	19,618.75	21,078.75
Gross Profit	31,750.00	34,131.25	36,671.25
Gross Margin (%)	0.64	0.64	0.64
Expenses			
Payroll	0.00	0.00	0.00
Marketing/Promotion	0.00	0.00	0.00
Depreciation	460.00	920.00	1,380.00
Rent	24,000.00	24,000.00	24,000.00
Utilities	12,000.00	12,000.00	12,000.00
Insurance	500.00	500.00	500.00
Payroll Taxes	0.00	0.00	0.00
Other	0.00	0.00	0.00
Total Operating Expenses	36,040.00	35,580.00	35,120.00
Earning Before Interest and Taxe	(4,290.00)	(1,448.75)	1,551.25
EBITDA	(4,750.00)	(2,368.75)	2,931.25
Interest Expense	0.00	0.00	0.00
Taxes Incurred	(218.79)	(73.89)	79.11
Net Profit	(4,071.21)	(1,374.86)	1,472.14
Profit Margin	-8%	-3%	3%

Higher Ground Farm			
Pro Forma Cash Flow Statem	ent		
For 2017-2019			
	Year 1	Year 2	Year 3
Cash Received			
Begininng Cash	10,000.00	8,450.39	10,061.01
Cash from Operations			
Cash Sales	50,000.00	53,750.00	57,750.00
Cash from Receivables	0.00	0.00	0.00
Subtotal Cash from Operations	50,000.00	53,750.00	57,750.00
Additional Cash Received			
Non-operating (other) Income	0.00	0.00	0.00
Sales Tax*	3,125.00	3,359.38	3,609.38
New Current Borrowing	0.00	0.00	0.00
New Long-term Liabilities	0.00	0.00	0.00
Sales of Other Current Assets	0.00	0.00	0.00
Sales of Long-term Assets	0.00	0.00	0.00
New Investment Received	0.00	0.00	0.00
Subtotal Cash Received	3,125.00	3,359.38	3,609.38
Expenditures			
Expenditures from Operations	54,290.00	55,198.75	56,198.75
Cash Spending	0.00	0.00	0.00
Bill Payments	0.00	0.00	0.00
Subtotal Spent on Operations	54,290.00	55,198.75	56,198.75
Additional Cash Spent			
Non-Operating (Other) Expense			
Sales Tax	0.00	0.00	0.00
Principal Repayment of Curent Borrowing	0.00	0.00	0.00
Other Liabilities Principal Repayment	0.00	0.00	0.00
Purchase Other Current Assets	384.61	300.00	300.00
Purchase Long-term Assets	0.00	0.00	0.00
Dividends	0.00	0.00	0.00
Subtotal Cash Spent	384.61	300.00	300.00
Net Cash Flow	(1,549.61)	1,610.63	4,860.63
Cash Balance.	8,450.39	10,061.01	14,921.64

Higher Ground Farm	1		
Balance Sheet			
For 2017-2019			
	Year 1	Year 2	Year 3
Assets			
Current Assets			
Cash	8,450.39	10,061.01	14,921.64
Accounts Receivable	0.00	0.00	0.00
Inventory (COGS)	0.00	0.00	0.00
Other Current Assets	0.00	0.00	0.00
Total Current Assets	8,450.39	10,061.01	14,921.64
Long-term Assets			
Long-term Assets	2,300.00	2,140.00	1,680.00
Accumulated Depreciation (-)*	-460.00	-920.00	-1,380.00
Total Long-term Assets	2,300.00	2,140.00	1,680.00
Total Assets	10,750.39	12,201.01	16,601.64
Liabilities and Capital			
Current Liabilities			
Accounts Payable	0.00	0.00	0.00
Current Borrowing	0.00	0.00	0.00
Other Current Liabilities	0.00	0.00	0.00
Subtotal Current Liabilities			
Long-term Liabilties	0.00	0.00	0.00
Total Liabilities	0.00	0.00	0.00
Paid-in Capital			
Retained Earnings	0.00	0.00	0.00
Earnings	(4,290.00)	(1,448.75)	1,551.25
Total Capital	9,930.00	0.00	0.00
Total Liabilities and Capital	9,930.00	0.00	0.00
Net Worth	10,750.39	12,201.01	16,601.64

7.2 Appendix B: Restaurant Interview Materials

7.2.1 Interview Transcriptions

Armsby Abbey

Z: Just starting with the basics, what kind of customer demographics do you guys have? like Age wise

AA: Pretty wide. Honestly it's really hard to put a finger on it. Theres 3 pretty strong components of the restaurants. 1 is food, the other is beer, then cocktails, and all three are focused so highly with each, have an audience. You know at the beginning I would've told you it was young and forward thinking, we get a lot of people from metropolitan areas. I can't even guess anymore. There is kids here for brunch eating really exotic stuff and 90 year old women from historical commission. It's everyone. I think we reach everyone

Z: And then do you have frequent customers coming in?

AA: Yeah sure. Absolutely.

T: Always busy?

AA: Yes thankful, we're going on year nine and it's been growth the entire way.

T: So what kind of ways do you advertise Armsby Abbey? Social media? Do you have a subscriber email list?

AA: Yeah at this point it is pretty minimal. Social media for sure is the monster grill of marketing. It's something we've done since day one and we did a lot of print ad in the beginning and mostly in bigger markets not even so much in Worcester, but in Boston and more basically food and beer focused print. And a little bit locally. Now it is more locally, very minimal. And then of course our social media presence.

Z: Are you guys by any chance a part of a restaurant association? In Worcester?

AA: No

Z: By any chance do you collaborate with other restaurants or different businesses?

AA: We know other owners. We've, since the beginning, have tried to help other people be better and locally source. One of the things we obviously focus on is leading by example, growing networks for farmers. We're not a part of any restaurant association but maybe Chefs collaboratives, there are a few other chefs in the city that are a part of it too. Its an organization focused on increasing sustainability within the food system and that's something we're apart of. We kinda get together and chat.

T: So I take it that you pass around ideas?

AA: Well sort of. I guess it's more of what are the sort of things we can do to help the farmers in the area.

T: So with the farmers, do you normally buy locally grown foods from local farmers?

AA: Yeah, well we have a couple local farms that we work with directly and then a big majority of the local foods we get is sourced by Lettuce Be Local.

T: Just out of curiosity, how far away are these farms?

AA: Western Mass, Lettuce Be Local's network goes basically to the pioneer valley/river valley. And then some as far east as like the 495 belt. We do source things from elsewhere in New England, we try to keep it regionally specific and try to focus more in central Massachusetts.

T: And this is all through Lettuce Be Local?

AA: No not all of it. They just make part of our job a little bit easier because prior to that we had to go to every farm. It was tough to manage, we work with 60-something farms. It's a big network. But it's mostly produce and then we work directly with some meat sources as well

Z: And just expanding on that, does it matter who you purchase from? How do you figure out who you are purchasing from?

AA: Yes, everything matters. How things are grown is very important, nutritional content is really important. It's easy; like with the farms we work with directly, we know who they are, what they're farming practices are, soil, different vegetables. We care deeply, we wouldn't just get stuff from farms that are just around the corner, there's gotta be more to it than that. And through Lettuce Be Local network, she makes sure that everyone in her network follows the set of standards she has, and we can always test if we feel the need to the nutritional destiny, the produce itself.

Z: The next question is what do you serve that makes you guys unique?

AA: I'll jump in on the level of commitment, there is no one that sources this way. There's definitely restaurants that are working to source well but not like this. It's hard to explain without, not trying to throw anyone under the bus, but for us this is a real thing. It's not a marketing thing, not a platform to stand on, it's sort of something that we have evolved a lot into. Damian has been running the kitchen for three years now and was with us prior. I feel like I have basically passed the baton to Damian, he has taken this way farther than I ever thought i could. He is so committed. There is definitely a moral aspect to it. Just because its cheap, its really easy to do it. You can get products from all over the world too that aren't like bad products, I mean we feel like we can get the majority of what we get from around here that is at a higher quality that it can outshine anything else so there's no reason for us to get it from somewhere else, if it's better and we can get it from here. I look at places that say that they source locally and sustainable yet

there's always contradictions on the menu. Like there could be grilled avocado and fish, I see this all the time, were they made by local beef maybe by a local something else, they stand on the local purchase, and it sort of applies to the different restaurant. We work really hard to make sure our money as whole stays in the community as much as it can, it's not about the sales pitch, it's about the conscientious. Obviously we use cities, there's things that we get that come from outside our footprint. But it's really minimal, we try to keep it as minimal as possible. We want to find the best products, finding locally is our biggest concern. it's not like it is here where we get the best ingredients and try to find something as close to home as possible.

One of our benefits of being here is, it's difficult to be successful this way, being this committed, it's hard. The economics are hard. I think for us we grew into it starting with the idea that we are always trying to get better. And we just get better and better now. Our resources are amazing, our resources are so much better than they were in 2008 when we opened. Now we can get produce all year, we have greenhouses, we have roof sellers, those we did not have back then. We were buying West Coast organic lettuce in the winter time. Those are the things that are amazing to me that we can bridge the local growing season with stuff from sale storage.

Z: And did that come from the local farms learning new techniques or because your sourcing from your own area?

AA: They're finding other ways to do things. They're learning how to clean things more efficiently. there are a lot of farms that have stuff stored through the winter time.

Z: Kind of backing that topic of the uniqueness of Armsby Abbey, back to your dishes, your beer, your cocktails, what kind of things do you do that makes your dishes unique? Is the particular food or is it that they are very local based?

AA: For me it's the products that inspire the dishes. I wouldn't go far and say that everything we do here is so unique, I try to keep it simple and delicious, so you know that is approachable. We try to do that sure are unique to highlight the product to make a delicious dish.

T: Just wondering do the customers ever say that they want something new?

AA: No, there's so much momentum in what we do. Any time you walk through this door, there is a lot that is different. Like if you come here three times a week, the draft boards changed every time you come in here. Its certain that a couple cocktails have changed, dishes in the kitchen have changed. Nothing is really static. We have a couple things on the menu that are static the entire way, little signature customer favorite things. Smoked _____, Macaroni and cheese, we have a cheese selection that we have become very well known for, around 20 cheese and those are changing quite often. So the goal was that it was always moving so I don't know if I have heard that from a customer.

Z: Have you guys ever thought about purchasing snails from a local farm? Or expanding...

AA: Is that an option?! It's never really been an option. Start talking

Z: Well we are working, I don't want to sell you the company at all just want to give you a background on our research, we are working with a rooftop farm in Boston called Higher Ground Farm and they are thinking of potentially farming snails. So that is what we are doing research on, trying to see if restaurants, if they're interested in local farming, and also how potential the market could be for selling snails.

AA: We could certainly do it here. There are a couple chefs in the city that i know would also love to do that. And yes we are interested in farming.

T: Yeah everything he is has is local, organic, grown on top of a building in Boston. If you actually know the chefs, mind if we could have their contacts.

AA: Sure. The snails are interesting. But as far as purchasing from the rooftop in Boston, that would probably be better for restaurants in Boston.

Z: We are interviewing restaurants in here in Worcester and Boston. Just to get kind of a gist to see how far the farm can reach.

T: That is awesome that you guys are interested in snails.

AA: As far as I know there's really only one producer in the states and its on Long Island and other than that it's all in France. That's really cool. Theres one in Montreal that's started, February or March. Talked to one of my friends who runs a restaurant up there and how it seems like they're on their way. Its cool stuff.

Z: That is all the questions we have for you guys. Thank you for taking the time to talk to us.

Asta

Travis: So Alex I have here one of my partners Zulean

Zulean: Hi how are you?

Alex: very good

Z: Good

T: Before we start do you mind if we record this?

A: No that's fine.

T: Alright perfect thank you. So just one of the basic questions we want to know is how would you describe your customer demographics like what kind of people that come in to Asta

A: Lets see. Its varied for fine dining concept. Mostly 30 to 60 year olds, professionals, the neighborhood. you would think the neighborhood would give us more young people like college students because we're located right done around BU and all that but it's more like 45 to 60 year olds.

T: Ok. Do you have a lot of personal conversations with your customers and do you ask them how you like the food and what not.

A: Yes. I speak with almost all the quests.

T: Awesome. Do you have frequent customers? People that come in almost everyday or every other day that like the atmosphere?

A: We don't get a lot of repeats within the week because of our shifting menus format. We do 3 5 or 8 course tasting menus. So we do get guests that will come in twice a month but usually it's once a month for the regulars and or once every season. But we do have a high repeat.

T: Yeah, ok.

Z: Perfect. So we're just wondering how you reach your customers. do you use social media or any other sort of resource to advertise your restaurant? How do you do that?

A: Well we do have an instagram account but honestly none of the people that come here have an instagram or don't really know how to use the telephone. Its mostly 100 % word of mouth. We don't have any source of advertising out there.

Z: Gotcha. Wow thats impressive. How do you meet your new customers? Do they just kind of, is it just word of mouth like you were saying before and they end up deciding to come in?

A: Yup, exactly.

T: Do you have an email that people sign up to to get frequent things or is it all, I know you said its word of mouth but I was just wondering if you had like an email subscriber list that people could sign up to?

A: We wanted to have one but none of us can figure out, like we can't get our sh*t together to do it. It would be nice to have it I think, to definitely blast you know in the past we've talked about sending a blast once a month or like a newsletter that may be featuring an ingredient or farmer that were using or something we're very excited about. But we just haven't had the free time to figure it out. And also were kind of on the fence, like I go both ways i think it's a great way reach people but also feel like everybody does that and it's another infringement on your personal space.

Z: Yeah. Were wondering are you by any chance a part of a restaurant association or do you collaborate with other restaurants or other chefs in the area?

A: I'm not apart of any association but as far as collaboration goes I think that, you know there's a group of cooks that work together and were pretty tight. We communicate quite often between us.

Z: Very nice.

T: OK. Now this is going into more foods and what not, what would you say makes your restaurant unique?

A: the tasting menu format stands out. there's no allocart option you have to order a 3 5 or 8 course tasting menu and then also I think that it's a very casual place. the place is very sophisticated but the atmosphere is certainly very casual. So that sort of balances and you don't see that very often in Boston.

T: I know you said you had a changing menu, where do you get the idea to come up with new dished? Where do these ideas come from?

A: It varies. Sometimes it can be the ingredients. We'll get something in that we're really excited about and we usually will start off by eating raw, cooking it, burning it, freezing it, dehydrating it, pushing it to the extreme and seeing what it releases from that. Then build a dish around that. Or it can be something really hip. You know if there's something tasty around you find something else that fits in and go together really well then you're two steps closer to a dish.

T: Do a lot of customers that come in want new foods new dishes, they want try new stuff, or is most likely the same thing every once a month. Just a repeat?

A: Well it changes. When we first opened I was very stressed out about that. We were getting quests that would come in twice within the month and I would panic because they would order the same menu and it was mostly the same and we would try to offer them different things but they would say "no I came here for this. I want this". And then quests would come back and say "oh this isn't on the menu anymore? I was really looking forward to that one dish". So I think the menu changes more than the guests necessarily like but it's what we do.

Z: Thats so interesting. I feel like normally you'd think the guests would be the ones pushing and wanting new things.

A: Yeah. Its surprising how many people just like to repeat the dishes or like a little bit of familiarity. Sometimes we'll have one dish that's been on the menu, like a 5 course menu, for while and the other 4 have changed. That goes well, like "Oh good I was looking forward to this I remember last time". But they like the balance of familiar and unfamiliar dishes.

Z: We were wondering do you regularly purchase locally grown products? If so how often?

A: So I think June till the first week of Thanksgiving is the Copley Farmers Market, there's actually farmers markets all over and they do, we shop copley twice a week during the summer time and the other markets if we need them. Then we use a couple different distributors that specialize in local products that we'll use more year round. There's one that does mostly stuff from Maine and one that does stuff from Massachusetts, Connecticut and Rhode Island, Farm Fresh, and we'll use them throughout the winter. I mean we always use them but supplement them mostly throughout the winter. Now don't get me wrong we have to use things from other parts of the country as well in the winter because Massachusetts does not produce enough stuff. But we do try to use as much local as we can.

Z: Whenever you're buying these locally grown products, does it matter who you purchase from?

A: Yes because not everyone produces the same thing and the quality varies from one producer to another. And also we've developed these nice long term relationships with people. I've been buying from this one farm for 8 years maybe.

Z: What's the farthest you've purchased from?

A: What do you mean?

Z: So you were saying how you were getting different products from the area when they were locally grown but also that, obviously it's too cold in the winter and things aren't being produced enough, so where's the farthest you would go for locally grown products?

A: Oh for locally grown product? Like what's my definition of local?

Z: Mhm

A: Interesting question because sure Connecticut is, I consider northern Connecticut local and I consider western Mass local. and just on the other side of there is New York but I don't consider New York local necessarily. So I think it's a fluid question and it's going to vary from chef to chef what their personal definition is.

Z: OK

A: I didn't really give you a good answer did I?

Z: No, but it's alright.

A: How about... I don't know. No more than a 6 hour drive away?

Z: Ok.

A: Because that can get you pretty deep into Maine.

Z: Yeah. Perfect perfect.

T: This will probably be the last question that we have for you. has Asta ever served a dish with snails by any chance?

A: Yes.

T: Is that common dish served?

A: Snails? No not necessarily. And they are not from here. They're from France. They're canned product from France. Local snails? I haven't seen anybody selling local snails really. But I'm not opposed to it and the guests enjoy it and it's a good product. I mean snails are a good protein. Why are you guys going to open up a snail farm?

Z: We are looking into developing a business plan for a perspective snail farm. Yeah.

A: Yeah it's definitely something in Massachusetts or in the area that we need. I think there's one on Long Island but I'm not really sure. I haven't bought from them yet they were sort of new and I haven't heard from them since. But yeah all the snails come from warmer climates or France. The wilds of France.

Z: Alright that's actually all the questions we have for you today.

A: Great thank you very much.

Z: No thank you.

T: Thanks for taking the time.

A: Yeah let me know if you get a snail farm off the ground we'll be good.

Bancroft

Travis: So we're doing a senior capstone project about restaurants in Boston and Worcester with their local food intake. Like I said in the email we want to be fast and not take up too much if you time, with the holidays and it's busy. I have 6 questions and we can be done. Like you were saying with 105 people I'm pretty sure it's busy all the time. What are the demographics that come in so the age, is it young is it old?

Richard: It really runs the gambit. It's the 105 is the private dinning its 270 seats altogether. In the demographic really here changes with the days of the week as well. We are surrounded by a serious corporate bases. IRobot's world headquarters is here, Keurig green mountain headquarters is here, oracle has a massive campus in this area here ,there's an incubator space less than three quarters of a mile from me where they got flex space set up so if you're a startup company and you need to dowse some square feet you get 2000 sq. ft. you grow to get 10000 sq. ft. they keep you in the same campus and provides support services around you as well so that if you're a startup and you don't have the money for an IT department or whatever support you need, it's there and present. So out of that, Tuesday, Wednesday, Thursday night, most of my business is business entertaining. In age demographic it grows everything from 20 something fresh out of school, first job, coming out for cocktails and going to the bar, to sea level employees: Chief executive, chief financial, whatever they are. Entertaining for these corporate corporations that are based around me. We also have the luxury we're are 15 minutes away from Hanscom airfield. Which in addition to being a military airfield, they're a large, one of the largest private airport, very quietly. It's the place where private jets fly in and out of. They don't have to compete like they do at Logan with commercial flights for runway space. So Hanscom is the preferred spot to drop. That being said, those people need a place to eat and we've built a space that attracts them so during the week, we're one demographic. It's business driven, probably 90% of it. And then on Friday and Saturday night we're a steak house. So we're dealing with social dining that's coming out. There the demographic has a tendency to be older. There we're looking at the 55 plus crowd that are either have sold their house in the city and have moved out here to the suburbs and have that urban field, experience. Or they live out here and they've been accustomed to traveling into the city and now they don't have to. And they can stay close to home.

Travis: Are there any other colleges around here? I'm not familiar with the area.

Richard: Small schools. Middlesex community is nearby. South of Boston, Waltham, Brandeis and Bentley are both probably 20 min away from me. Tufts U is about 30 min away from me so nothing that's close enough where you can commute from campus to here but close enough to try. We see faculty from all the above.

Travis: So I know you are a new restaurant and from the sound of it, it sounds like you're busy all the time. How do you advertise Bancroft to customers around the area?

Richard: That's a very good question and we do not advertise at all. Word of mouth, social media has changed marketing for hospitality industry and particularly in the last decade. So utilizing Instagram, Facebook, Twitter and continually providing feed for the website, both

through our website and through Facebook and social media essentially has helped us to promote. Because we are so novel out here and because I've been in the business for so long I have a serious amount of connections. We have some editorial coverage that would not normally have come our way. We were three months old when the Boston Globe ran its first review of us. Three weeks later, Boston Magazine hit us. The following issue in the Boston Magazine hit us again and then hit us again. So three months in a row the Boston magazine, the Boston globe ran us in August of the first year we were open and then at the holiday's year end issue, they named us one of the top 25 new restaurants in the Boston Market.

Travis: Are you part of any restaurant associations by any chance?

Richard: Massachusetts Restaurants Association. That's something I've been involved with Mass Restaurants Association. For 20 something years, so wherever I am I join the restaurant association. Mass RA is good, it's a strong group. They're a very active group. Both supporting the business on day to day operations there are some resources that we utilize on a regular bases. They also help on the legislative front. There's a lot happening in the legislative front in our business.

Travis: How many companies are in the Massachusetts Restaurant Association?

Richard: I believe there are I want to say there's 600+ restaurants. That's just restaurants. Then there's any number of accounting firms, there's legal firms, consulting firms. Anybody that would anything to do with the hospitality industry is represented in some way shape or form.

Travis: Are these big restaurants, small restaurants

Richard: anything in between. There are some small sub shops that are a part of the restaurant association.

Travis: Do you collaborate with any of these restaurants at all?

Richard: I do quarterly meetings through the restaurant association. Essentially they do business round table. So we get together and meet with some of the smaller right here. Obviously it is a very big operation, lots of moving parts here. But the problems that are apparent in the industry does not matter if you have 300 seats or 20 seats. You're still going to run into, not the same frequency, but you're going to run into the same issues. So it's good to sit and just to talk about what's out there.

Travis: So that's just like talking over problems I presume. What about menus? Do you talk about "oh maybe you should try this, maybe you should try that?"

Richard: Very rarely do you collaborate on that in that kind of environment. You talk about what's selling, but you'd be hesitant. Like here with Chef Mario is, again, my partner in crime. So work the restaurant together, we worked in a fourth but at different times. And Mario is an incredibly talented guy, and this is a unique concept. It's a steakhouse but not a steak house. It's

a farm to table to restaurant. A decade ago, farm to table was a novel idea. Today saying you're a farm to table restaurant is almost like saying you wash your dishes before you use them. There's an expectation on the consumer but certain amount of the product that's in the building is going to be locally sourced.

Travis: I've got a few more questions. This is trying to focus more on the menu. I know you're a steakhouse but not a steak house. So what do you think makes the Bancroft unique?

Richard: The statement that we're a steakhouse but not a steak house. To back up a little bit, my background was with Capital Grille. Capital Grille is a 50 unit restaurant company. So I joined them to open the second restaurant and I stayed with them through 23. The last one I did with them was in the Chrysler building in New York. I left them in 2005, so it's 2016 and I left them in 2005, and 2004 we came out with a couple of chef driven dishes on the menu. We did porcini roe Delmonico and a Kona crusted sirloin. It's 2016 and if you got to the Capital Grille right now and you look at the center, there's two chef plates: porcini roe Delmonico and the Kona crusted sirloin. While they recognize that chef driven is going to be part of the future, they're too big to change. Here, we know that the consumer doesn't want just steak on a plate anymore. Consumers different today than they were 10 years ago, 20 years ago. The food network and the internet have brought dining, people are seeing things and are willing to try things and looking to learn a little bit more. Innovation on the plate. The thing with steak houses is, one of the reason steak houses are successful is because they're safe. If you and I do business together, imp in Cincinnati, you're in Worcester. We do business together for 2 or 3 years and we talk on the phone 2 or 3 times a week and I'm giving you orders all the time. It gets to the point where you know my voice when I dial. You don't even have to ask. And you can tell by the tone of my voice that something is urgent critical or wrong or everything is just fine. Now there's a change in my company and I need to come to Worcester because my boss wants me to see the actual production facility. Travis is in charge of taking me out. Travis knows me so well he knows the tonality in my voice but has no clue what I like to eat. Where do I go with this person? I have no idea. I can't take him to something crazy because he might not be into it. So steak house, there's steak, there's chicken there's fish there's potatoes, there's salad. He's going to find something or she is going to find something that they want to eat on that menu. So that's where steak houses really got a lot of their traction because it was safe for business entertaining. And they were consistent. That being said the world is a different place today. Yes you still need that safe, which we have here. We've got a great brick chicken on the menu, we've got some very simple steak dishes on the menu. But we've also got a lobster sashimi that you're not going to find in a steak house. Chef does polenta as a side, you're not going to find that in another steak house. We do a Caesar salad but it's deconstructed its whole leaves and full croutons on it a soft boiled egg on the side. It's so much more creative and that's what people are looking for. And that's, for us, a competitive edge.

Travis: Do you happen to have customers that come in frequently, maybe once a week and ask for the same thing over and over again?

Richard: Both. We have people that come in, there's people that I see two nights, three nights a week. They're here to have the exact same thing when they come in because they know what

they like. They also know that chef changes the menu every two months. He doesn't do wholesale changes, but four or five dishes on the menu change completely, and then the accompaniments on the dish change. Protein stays, the center of the plate stays exactly the same and what's on it for the preparation gets mixed up a little bit so that we're constantly freshening things up. That's not a typical steak house.

Travis: I know that you said while we were taking a tour of the kitchen that you don't really buying from local establishments.

Richard: Right now. Right now because we're in New England. There are some people that have food houses still where we can get some things from them. Buts going to hard. Kale you can still get right now although it's supposed to get to 15 degrees tonight and it's going to snow on Monday.

Travis: How often do you normally buy from local farms? Let's say in the summer.

Richard: In the summer time. Well two things happen. One we have a sister property in Groton Mass called Gibbet Hill Grill and Gibbet Hill is on a farm. Gibbet Hill is on a 400 acre farm and most of it is grazing its pasture land for a herd of Black Angus cattle. Not enough cattle to supply the restaurant but enough cattle to keep it going as a cattle farm. There are currently almost 4 acres that are actual farmland, crop growing land. Two weeks ago in the small private dining room, small farm manager and sister were here. All the chefs in the company where here and they sat to see cattle catalogs and went through next season's growing. Chefs get to select what goes in the ground then harvest that. In the heat of it in August, harvest is happening every day. So six days a week a delivery truck shows up with fresh product from the farm. It's a great convenience, it's exciting for the staff and exciting for the customer because they know where it's coming from. There are nights where literally salads or lunches, the salad greens that are on your plate where in the ground at 8 o'clock this morning. Now at noon time they're on your plate or the carrots you're eating tonight at 6 o'clock were pulled out of the ground this morning.

Travis: Is that your main source for the locally grown foods? Do you source anywhere else?

Richard: Sure, sure. Through our wholesale providers as well. To back up a little bit in my past in addition to restaurants I was also involved in a hydro product farming project. Actually still am involved, not as active today, growing hydroponically on a rooftop in the Bronx through a company called Sky Vegetables and was growing out at grade near University of Massachusetts Amherst campus. Utilizing some of the students from school and growing hydroponically year round. Through that and Mass Department of Agriculture I've gotten very involved in because I was farming and I was a farmer for a while and got to meet a lot of people and a lot of local farmers. While it makes no sense for them to deal directly with one restaurant its distribution and it's just driving ground and gets painful for them. They'll sell through wholesale here in town. The wholesale buyers here in town I got to know when I was farming in salad. So we have a very unique relationship in that front. There are times where ill identify a specific property where I know they got X Y or Z coming out of the ground coming out right now. Get it for me please.

Travis: What's the farthest you've ever gone to purchase locally grown foods?

Richard: We get pork out of upstate New York we get product out of Vermont we get product out of New Hampshire. The thing with local product, from my days being involved in it, you don't want it to be more than 3 hours. You're beating the purpose of it if you're trucking 6 or 12 hours. It makes no sense. So trying to do a small radius that being said there are some farms that produce something unique and again Berkshire pork that were buying and the heritage breed that's raised in Vermont or upstate New York rather. Chef haves some relationships with farmers so we're getting that sourced on a regular bases.

Travis: Awesome. So I know that you're saying the menu changes every two months.

Richard: Dinner menu changes every 2 months, dessert menu changes once a month. Dessert menu we grow raspberries at the farm, we grow strawberries at the farm, we grow concord grapes at the farm. Rhubarb at the farm. So that will show up in the desserts and that's one of the reasons we change that a little bit more frequently because the true strawberry season is short and you get another crop later but the true strawberry season is short and it's in June. We run with it while we can and it's gone, same thing with raspberries and blackberries. The season for them is short and as Americans we've gotten accustomed to being able to buy everything all year round. 25 years ago that's not how the world worked. You ate strawberries in June, you ate pomegranates in the fall. It's not the way it is today where the products come from everywhere. Thousands of miles away.

Travis: I know you focus on protein, the steaks and chicken, have you ever had anything with snails in it?

Richard: Snails? No.

Travis: No?

Richard: No. At least not in this restaurant. We've done snails in other concepts but snails are hard. They're hard. You either, as a consumer, you either love them or hate them. If you hate them you don't even want them on the table. You don't even want to look at them. Personally I love them. They're delicious. They're not economically viable.

Travis: That's fine.

Richard: You have somebody growing snails?

Travis: Yes we do. Our project is helping a local rooftop farm in Boston. He's selling greens and vegetables right now but he wants to move over to snails. So he's trying to figure out where it might be viable to start selling.

Richard: Which one are you... Can you talk about them?

Travis: John Stoddard from Higher Ground Farms

Richard: Higher Ground? Sure. It's a small farm. So I used to be Sky Vegetables. Actually still am Sky Vegetables. But we are greenhouse grown hydroponic year round. It's not open air growers.

Boynton

Zulean: So one of the basic questions: how would you describe your customer demographics? Like the age range.

Steve: Here, I think we cover the whole spectrum. We've been voted most kid restaurant in the city for about 10 straight years. We're also a 50 year old restaurant so we have like 4 generations worth of clientele. So you see huge age demographic in this place from obviously kids in car seats to walkers. And diversity wise I think we are amazingly diverse restaurant. I don't thinks there's any race creed color whatever that doesn't feel comfortable coming into the Boyton.

- Z: And you have like frequent customers that you know that you say hi too?
- S: Quite a few. Quite a few.

Travis: Just an advertising question: how do you normally reach out to your customers? Do you use social media, do you have an email list that people sign up to?

- S: For the 99% of it, it's social media. I actually don't even budget an advertising budget. So i do very little adds, print out adds. Now a days I don't even know how many people actually look at printed media anyway. I do a lot with Instagram, Facebook. Those are the primary two. We use a new program called tab hunter.
- Z: What's that?
- S: That is a real time beer list cocktail managing program.
- Z: Thats really cool.
- S: So you'll see in the bar there's two digital screens with the bar menu rotating on. I can open an app on my phone and actually change a beer or cocktail and within 60 seconds it will change on my boards it will change on my facebook page and it will change on my website. And it also sends a tweet out saying that we changed a beer.
- T: That's really cool I did not know about that.
- S: Twitter I use mostly for beer. I'm not big tweeter. But I do find that a lot of the beer companies jump on the twitter wagon so a lot of stuff gets posted and shared pretty quickly though twitter.
- T: And I could say you have a big following on social media.
- S: Pretty good. It's constantly growing. I mean Facebook I have over 10,000 followers or likes whatever you want to call it. And then i have about 1,100 now. We run two Instagram accounts. We have Boynton Bar and Boynton Chef. I do a lot of reposting so if the post something ill

repost it or someone liked something here and put it online I'll repost it. I try to give love where love is do you know.

- Z: Are you by any chance a part of a restaurant association or do you know of any restaurants in the area that are, like the chefs and managers in the area.
- S: Yeah we're just and independent restaurant. I mean the Sole is part of WRG, Worcester Restaurant Group. they have there three restaurants: Via, One Eleven, and the Sole. Then you have Niche group and they have like 9 restaurants. So those are the only big restaurant groups in this city there really isn't, I wouldn't say there's like a group dedicated to like chefs or like that, I'm sure Boston there is. But around here nothing, that I know of.
- Z: Have you ever collaborated with another restaurant?
- S: I have not. I have, I know last year they did an event, No Kid Hungry, which is a big charity event where they shut down the Chop House down for a night and they had like 5 different restaurants come in and each did a plate and all the proceeds went to that charity. Working with other restaurants, it hasn't come to fruition but we're trying to do one thing this city, the chefs are very anonymous in this city and they keep talking about our budding restaurant scene but no one knows who the chefs are in this city. So i've been working with the owner of the Rhino a little bit, not as much as I like, on kind of creating some sort of either industry buzz or industry group that really kind of highlights the chefs in a way you know because there's a lot of good chefs in the city and no one knows who they really are. There's no publication, there's nothing really out there to give them any love. and the only way you really get any kind of, I want to say, national recognition you have to be published you have to be seen. I know a couple of chefs in Boston, they have publicists.
- T: It's a good cause to get people opened up to the world and try new things.
- S:I follow one chef in Boston and they do a lot of collaborating stuff and they bring like chefs in from other parts of the country and they do some really cool to be able to do some of that in this city. But it's tough running a restaurant and trying to organize it at the same time.
- T: So now I just want to touch base about the food that you sell and I think one of the biggest things right now is the local movement, like buying locally from local farms. Do you happen to order anything from local farms from Worcester or even the surrounding towns and cities?
- S: Food wise not really. Not because I don't want to it's more based on the volume of the restaurant. A lot of the smaller, boutique farmers can't bring me in enough product. I run a menu for say two weeks I need a thousand heads of, a thousand different types of tomatoes they usually end up having only 250. So it works out great for your smaller people who are doing maybe special the moment but for us it's very difficult. I've tried several times, most times it hasn't gone as well as i'd like it to. It's not generally because I don't want to, I wish I could do more and a lot of times I don't really care what it costs I'll do it to support the local farmers, but they just can't meet the demands of the volume of product that I put out or require.

- T: What would be the farthest that you've reached out?
- S: Distance wise? Mostly Central Mass.
- Z: What makes the Boynton unique? Like if you were going to present this to a board or something, what do you believe the Boyton is unique for?
- S: I think one is tradition now that we've been here for 50 years. We've almost become a landmark place. Two I take a lot of pride in our diversity and clientele. Everybody feels comfortable here and you can tell because you have people that come in here with an old friend and sit here for 4 or 5 hours. People just feel comfortable here which is something nice. From a food perspective, we are pretty much a scraps kitchen. So we make or try to produce just about everything in house. It may not be necessarily 5 star gourmet but you're not buying processed food. We are trying to use the best quality food product that we can, within our budget, which I take a lot of pride in. We make all our own deli meats, we actually have only one deli meat now on the entire menu that we don't actually produce in house. Pepperoni is the only thing we're not making in house.
- Z: Where do you get your new ideas for dishes? How the menu gets turned around, if it gets turned around?
- S: Yeah we do a new specials every two weeks. Sometimes a lot of it is just online research, I'm kind of a social media guy and I follow certain chefs so sometimes I see what they're trending and then I try to see how it can apply to our volume. Sometime it's just traveling. Everytime I go somewhere I end up coming back here with some idea. You know I did a beer dinner, our last beer dinner I mimicked my travels through Italy this summer through the courses. So it was kind of fun because I got to explain where all the dishes were actually coming from that I was presenting to everybody that came. That was kind of, that was fun.
- T: With that, with all the traveling and the different ideas, how often do usually change the menu to fit what that idea is?
- S: We have a big menu, we cover the whole globe and I think it's just 50 years of adding stuff. I've been here for 12 years. I think I've taken about 15% to 20% off the menu over that time frame. I always kinda try consolidate it a little bit every time. So it's tough to categorize but we, the main menu itself, I'm actually going to do another change in January, mostly price increases and change a couple items. And then we do the bi-monthly specials. So every two weeks we change the specials.
- Z: Do you believe that your chefs are very experienced in diverse cooking of different foods?
- S: They cook what I teach them to cook. I have a very, almost every single cook in my kitchen was a dishwasher. We do a lot of hiring from within, people kind of work their way up from the bottom. I don't necessarily have a lot of classically trained chefs. My cooks have more culinary

knowledge than they realize. But I wouldn't say I have an army of CIA grads back there who I could tell to just go whip up some other sauces and they'd have any idea what I was talking about

- T: This might be a very weird question to ask but it's what we are focusing on. Have you ever made any dishes with snails in it?
- S. Sure
- T: Is that part of the regular menu?
- S: Nope. I've done escargot a few times here. Not in a while no.
- T: Has it ever been popular?
- S: There was a time when snails were super popular, I don't have people coming in necessarily and asking for them. I'm sure, it's been a while actually, we did a steak sauce with them on top of a steak. Then I worked in a restaurant in Michigan, we actually had the classic escargot where we stuffed them in the shell and did the compound butter. Is there a reason for snails? Do you like snails?
- Z: Throw it in there. So the farm that we're working with, the rooftop farm in Boston, they're just trying to do research as to like how feasible it would be to start up a snail farming business. So they're a farm right now but they're looking to expanding into snail farming. So we are just doing the background research.
- S: Is that, who do I follow in, I used to follow one rooftop farmer in Boston who did a lot of greens.
- T: John Stoddard?
- S: Maybe.
- Z: Higher Ground Farms?
- S: Yeah thats them. So. I actually wanted to do something here but it always ends up being "I'll do this tomorrow" and then the summers over. Place like this, I don't know if my clientele would be blown away or know the difference. I don't want to say that I, we aren't fine dining, not that I won't put anything on a plate here. I've done everything from wagyu to frogs legs, anything I can if I want to run it I'll run it here. I have a clientele that trusts lots of the specials and will order anything. But has there been a demand for one? I can't say that i've had one.
- Z: Thats all we needed to know. It helps with our research.
- T: Perfect. 15 minutes. Not wasting time.

deadhorse hill

Alyssa: How would you describe your customer demographics?

deadhorse hill: I think we do pretty well with a couple different constituencies, we get a lot of people that are kind of mid to late 20's, I would call them the younger, hipper set of people. They tend to be either single, or double income no kids situations. We also do pretty well with a set of people that are a little bit older, typically the empty nesters, whose kids have gone off to college and then anybody who is deeply adamant about food, tends to prefer a restaurant like this, something a little more personal.

Alyssa: Do you have customers that visit frequently?

dh: Yes, regulars. I think restaurants like ours can't survive without our core regulars.

Alyssa: And with those regulars do you happen to have personal conversations about their experiences?

dh: Yeah, all the time. If a guest comes in and they are here often, most of the staff are going to know who they are, know a little bit about them, whether it's what they do for work or what types of things they like, they make a point of bringing that stuff up.

Alyssa: How do you reach your customers whether it be social media or email?

dh: We do not do email, though we want to. We have a pretty active social media presence, we work hard to make people aware of us through various public relation strategies, so that's participating in competitions or pitching stories to publications that may want to write about food, we just try to come to work everyday and just crush it so hard. When you leave here you know what you could have done better or what you need to better and this whole evaluation at the same time, you know pushing yourself to the limit for service, that goes a long way.

Alyssa: I agree.

dh: Otherwise, then it's just not what we're said advertised, which happens a lot and that's what creates a lot of disappointment for people that hinge on the social aspect that kind of carries them over.

Alyssa: How do you meet new customers, how do you bring people in when you meet them?

dh: There's been times when I've actually gone to Mechanics Hall for an event, and people were showing up early, and I'm like WTF why aren't they here? And I go into Mechanics Hall and I pull them over here, that happened once, not multiple times. But I will grab people off the street. But that was the only time I've gone over to Mechanics Hall, went up there to this black tie event and said "Hey, you buddy, come here we're gonna go have some drinks" and he's like "Where's Gary?" and I'm like "Forget about Gary, he'll figure it out" To put a more business answer to that

question, by the way, I think it's a lot of word of mouth, especially this type of restaurant, if we do really well for a guest and they tell their friends, and their friends come in, that's kind of how we grow.

Alyssa: Like I was saying before, we interviewed several restaurants and a majority of them recommended that we talk to you, I definitely think there's a network and collaboration.

dh: I think it's only fair that we each want each other to go through the same misery of this interview process. After this you should go talk to John at the Muse. He doesn't need to get off the hook.

Alyssa: Are you guys part of any restaurant association?

dh: Discover central mass is more about promoting Worcester as a tourist destination, a place for people to come, chamber of commerce is about promoting a lot of small business and downtown but we're not members of a specific industry restaurant association. We don't necessarily see a value in that, like we do something different. Same thing with advertising, like opening up the latest addition of In City Magazine, and seeing deadhorse hill next to an advertisement for a hookah bar or like a bingo hall, it takes away some of the allure. It's also part of the reason that we are down here, we're not getting washed out of that landscape of other things. We're doing very well, we're doing very great work, everybody goes out of their way to come here. There's no issue with that I don't think.

Alyssa: Do you regularly purchase locally grown products?

dh: Yes, we have around 60 suppliers that we work with. We make an effort to find the best ingredients but also to find local ingredients, so when chef has a day off, he's driving around the farms and talking to farmers, and doing all that kinds of stuff. It's really part of our DNA.

Alyssa: So would you characterize your restaurant as "farm to table"?

dh: No, not at all. Honestly, I think that whole farm to table is a complete crock of sh*t. I think it's like greenwashing, you know. It's like anything though, there are people that just say it and don't mean it. "Oh we're a farm to table restaurant, we got this beef from whatever" but it's like the steak and that beef on your menu is a fully composed dish, and there's all these other ingredients, but where are those coming from? "Oh they're coming from here, here, and here" and I'm like "Where's your citrus coming from these days? We get it as local as possible." Right now, that's Mexico or Florida. Our Colombian coffee, we get that as local as possible, that's Colombia. Black pepper, clove, coriander, that's stuff's coming from India or Thailand, like you can't avoid it. Our French sea salt, guess where that comes from? France. I'm aware of that, we're all aware of that, and we just support local farms, using the best products that we can and try to be as creative as we can, not every single thing is local. Tea comes from China, that's a fact and it should not be ignored. I think the farm to table thing is a gimmick, we do endorse people that are very responsible about the way they procure things or cultivate things, they need to be able to know the first thing about the earth and then the people that work for them and then also the

people that they're supplying to. So, it's a very special process but it's not to be labeled as "farm to table" as far as I'm concerned.

Alyssa: Yeah that's a great answer. So does it matter who you purchase from, as far as ethically, I guess price, taking everything into consideration?

dh: It absolutely matters who you purchase from. We are a small business, we support other small businesses. We work with local farms, these are real people. We don't have like the big Cisco truck show up and then some hourly workers that just can't wait to get off the clock and start over time. We don't have that, we have like a pickup truck show up with people that we know on a first name basis come in, and there in like dirt-covered galoshes, and they have dirt on their fingers, they just picked these vegetables and they drove to us. And we're like "Oh thanks" and we go downstairs, and we weigh everything out but they don't even know what they have. So we go downstairs and we're just sifting through vegetables covered in dirt. One of the people we do support tremendously is a local group called Lettuce Be Local, are you familiar with them?

Alyssa: Yes.

dh: Yeah, Lee and Lynn Stromborg, I think they're fantastic and what they've done is tremendous as far as a lot of the homework before when a long time ago I worked at a very high end French eatery kind of place and it was "farm to table" you could say, but the amount of time you put into researching each ingredient, was like exhausting, that was a full time job for someone. And what they do is they certify is that everything is legitimate and no one is trying to like pass of these radishes that are like in fact a commodity that's something that has been organically, or locally, or that is an heirloom product or something like that. Lynn and Lee they do their homework, they make sure that stuff is legitimate and any time we get something from them we know it's a breath of fresh air. It's absurd that people even have to go through those stressors, just to get their hands on food. But I think it's terrific, we love them.

Alyssa: What foods do your restaurant serve that make you unique?

dh: Let me answer your question this way, we change our menu daily so dishes come on and dishes come off. A lot of our cuisine is influenced by what's fresh now, where the staff in the kitchen have worked before, the things that they've done. We have a really strong meat program, we have like our beef, or our steak on the menu that we source from a farm in Vermont that's a good cut or good grade beef, we have a prime rib eye on there that's sourced locally and those would be like really high end items that we would be charging like \$100 or \$120 for those and they're meant to be shared, so that kind of draws people in a little bit and that's what's unique about us we also do a lot of Japanese influenced dishes, particularly in our preparation of fishes and things like that that's not something we'd see in other restaurants in the area. What makes us unique?

dh: I would like to say that almost everything about this place makes us unique, in particular we never just phone it in. You get something and you're like "Wow that's gorgeous." The person that brought that to us, that cultivated this, really went like above and beyond like this is more

beautiful than he led us to believe or what we thought it would be. And it's like ok just chop it up and put it in a pot, oh no this very special and we need to do justice to do that. We need to be very careful with the preparation, the execution, and the overall the creative outlet, the innovation of that dish and what it's going to be. We'll get things that are typically a garnish, but we'll get this and it will be unbelievably gorgeous. And you know what, this is too pretty to just be a garnish with something else. Like this needs to be a focal point, have you ever had a parsley salad, no this parsley is gorgeous, and it's light and it's bright and we need to do a parsley dish. A dish that revolves around this beautiful parsley, this is just like an example. A lot of people won't do that, something had to die to become the focal point of the dish. And it's very easy, you're cooking proteins,it's great they're delicious, chicken, beef, pork, shrimp, butter it's great, you're gonna come up with something tasty every time. We push ourselves to do a little bit more than just that, it's really to showcase the beauty of certain ingredients and you don't see that a lot.

Alyssa: I know that you had mentioned that you cook some Japanese-style food, would you say your chefs are experienced in making diverse foods?

dh: Yeah absolutely, Jared grew up in NYC, and we met in Boston when he came out with a friend of his from NYC and he was gonna go back to NYC because he completed the project he came to Boston for and that was to detour here, but he's worked with some of the best restaurants in the world, he worked for Thomas Keller at Per Se, he worked for David Chang, he was at Moraya, he was at Grand Version Tavern, very impressive resume, not easy places to work at. He just likes food, and it's obvious in the preparations. Very solid.

Alyssa: Do your customers ever express the desire for new dishes or do you ever have a dish that customers will come back and say "Hey do you have that today" or "What happened to that dish?"

dh: Yes that happens, our menu changes every day so no one is ever like you should change your menu more often. We've been open 7 months now, we've changed our menu so many times with so many dishes. We've done that more than most restaurants do, over a 10-year period. Sometimes 5 or 6 new dishes are going on the menu. And everybody here, we go through them with a fine tooth comb, and in the sense that we analyze things and not that there's hair in things, that's what the comb is for. Everybody is expected to know all about it, it's great. All the staff here are incredibly educated, they're driven, they're internally motivated to figure these things out. But we do get a lot of people asking for X, or whatever, like "When are you gonna do that again?" and honestly, probably never again, that one time we had 10 pounds of this and made it into that, it's gone. It turned out to be fantastic, it's great. But yes people do come in, they ask. There's one thing that was very memorable, that they were hoping to get again, and the cool thing with that is that like "Hey if you really dug that, I remember that, you should really try this out."

Alyssa: I have one final question, well two so I would like you both to answer. I'll wait until he gets back.

Alyssa: Have you ever made a dish with snails?

dh: Here? No we didn't get into any snails since we opened. Yeah like if you go to France, escargot is the thing. Every place I've ever worked, at one point or another, during every year, Burgundian snails come in.

Alyssa: So would you be willing to serve them here?

dh: Of course, and I think honestly and Timmy over at Rebella did like a play on Kongee, he made a porridge he made at like super Italian, but with snails, it was like a snail Kongee but he made it very Italian. It was very tasty.

Alyssa: Personally, I have never had them. But our sponsor that we are working with has a rooftop farm in Boston, he grows vegetables now and he is just looking to see would restaurants in Boston and Worcester, would they even want to buy snails? Would it be a thing that would even be worth his time. So that's what we are researching now, do people already purchase locally grown food, etc.

dh: Yeah you know what, I don't know anything about local snails, there are products that will just come in a can or a jar or something like that and that's just how they are. And there's nothing wrong with that, and there's a few of them, one of them are Burgundian snails, there's a company that does their snails in a can and every high end restaurant gets their snails from this company and they show up in a can and I don't even think you can call up and order them, I think you have to be like well what are we doing these, who are you. You know, you can't just throw our snails on things. So I don't know what the species of snail that would be local, or whatever.

Alyssa: So the species we are looking into are the Helix Aspersa, which is called the garden snail, it takes one to two years to mature and he would basically find a way to contain them on the rooftop, you have to get the permitting and he would have to figure out does anyone even want these. So our consensus is that a lot of people don't have a way to get them, people don't have a way to get them but in a can.

dh: So demographically speaking, the local food movement is accelerating. So not the worst time in the world to consider something like that. So the flip side to that is that it comes down to the quality of the ingredients, so if you can produce something that you know is gonna be really high quality, then you can build a market for it.

Alyssa: So my last and final question would be do you have any recommendations of anyone else we could talk to that believes in the local food movement?

dh: Hmm, you're looking to stay in Worcester right?

Alyssa: We are doing Boston and Worcester. Sean may have a few in Boston, but it sounds like you have talked to all the major players. Maybe Steve John from the Boynton.

Alyssa: Yeah we did speak to them.

dh: I mean I think they are more on the Cisco end, but that place is been around a long time.

Alyssa: We did speak to him and his kind of consensus is that, they dish out things at a high volume, and they need things that are made fast. They are more about getting the food out of the kitchen, and for something with snails, he was saying that we can't get enough of it to sell it and we don't want to have something that's only gonna be there for a short time, when we can only get a limited amount. That's something the Sole had mentioned too, would be that there are a lot of ingredients they need, they need 20 cases of lettuce but they can only get 10. They just want to stay consistent. So they'll order as much locally grown things as they can, they get a lot of fresh fish, every single day, so they kind of use that as they're getting this fresh, but we need this and we just want to be consistent. In a place like this where the menu is always changing it makes sense, but in a place where you are doing more high volume, it would make sense. That's kind of the research we have come across.

dh: I mean the thing that always fascinates me is that we will get that 10 cases of lettuce in, and we will make it 10 cases worth of salad or whatever the dish is, and when we're out, we're out. We're always talking during pre-meal and you know when we're ready for different services, and how many different portions of different menu items do we have. Because we run out all the time.

Alyssa: And I like that too because what he was saying at the Sole, a lot of their customers had been there for years and years, they've been around for 38 years and they have the same customers, and they say that they want to be consistent with that customer, they don't want to change the way they look at a dish. That's interesting, it's different because you said like here you serve a lot of millennials and a lot of people my age, people that are looking for something new all the time. Most definitely for me, I'm not the kind of person that eats the same thing all the time. I like to change it up, but thank you this was great!

Figs & Pigs

A: To start off how would you describe your customer demographics? Age? Sex? Etc?

C: It actually varies because we are downtown so we get the population of the downtown workforce. So it is really diverse. It's everyone from 20 something year olds to 30s. I do know that my Facebook followers are mostly between 25 to 35. I don't think that's surprising because its Facebook and most people over the age of 40 don't really use it. But then I have the more mature workforce as well that come in.

A: I work right across the street so I have been here a couple time and it's really good.

C: Oh good!

A: Do you happen to have any person conversations with your customers?

C: Every one of them.

A: Do you have regular customers that visit frequently?

C: We have people that come in every day.

A: So you mentioned that you use social media to reach your customers, do you do any other outreach? like email? or feedback?

H: Flyers or things like that?

C: No, I did a mailing list early in September to try and create more business around catering and events because I have this extra space where I can do like networking parties and things like that after hours. But aside from that it's pretty much primarily Facebook, social media, word of mouth.

A: Are you part of any restaurant associations or do you network with other restaurants?

C: Yes, so I am part of the Chamber of Commerce, Discover Central Mass, and I am also a member of Central Mass Grows Association. And then I am part of, under discover central mass they have a group right now called well I don't know what we're called, it's a restaurant group, it's basically a group of area restaurants that are trying to help provide a better kind of brand or message about the restaurant scene in Worcester. Because there is a perception, we're trying to break a perception that Worcester doesn't have a great food scene when it really does have a great food scene. It's not only that it's not being seen outside of Worcester, it's also not being seen inside of Worcester, like people that live here don't necessarily see it as a food city and people outside the city don't see it. So we are kind of working collaboratively on trying to figure out to break that image.

A: That's great, I didn't know that. Do you regularly purchase locally grown products?

C: I do not, I wish I could. I try to use Lettuce Be Local, which is an area group around here. It's just challenging for me because of my price points. I need to keep my prices at a very affordable rate, it is challenging. I did all summer long, like in the Summer it is easier. Produce is less expensive, I get tomatoes from Barbarians Farm in Westborough.

A: Along the lines of that, does it matter who you purchase from? Like wether it be ethically or sustainability? Or anything like that? Is there anything that motivates you to purchase your food from certain people?

C: Well most of the major distributors have good programs around, making sure that they're buying good quality products and that they're working with local people when they can. Things like that. I buy from primarily from Cisco. From my perspective, as long as they have all of that, they're a suitable partner for me. For it is whatever makes my life a lot easier, it's just me, I don't have a management staff or anything. They make it easier for me.

A: What does your restaurant serve that makes you unique?

C: I think what makes us unique is that the menu changes every season. Everything is made from scratch, we don't use any processed foods. And i think my menu is very eclectic so it has unusual pairings like you know if it's not in season, I either don't serve it or pure it. For example, for the BLT, when the tomatoes are not in season from Barbarians, I make a tomato jam. It's really good, you gotta try it, I have had people say it's like crack haha. So I think what's different about the menu is that it's got a lot of diversity, it's got a lot of things that appeals to people that don't eat meat, a lot of vegetarian, vegan options as well as you know the people who eat macaroni and cheese, grilled cheese, the pork that's slow roasted.

A: Would you say that your chefs or cooks are experienced in making diverse foods?

C: Yeah.

A: And do any of your customers express any desires for new dishes?

C: Yes and no, I mean not really, because we change our menu frequently, usually it's the other way around. I stop serving something and they like when is that coming back on that menu?

H: Do they just tell you by word of mouth or do you have a feedback system?

C: They tell me by word of mouth

A: And you're here all the time right so you know, you have a good relationship with the customers, what they want.

C: yes I am pretty much here all the time.

A: Have you ever made a dish with snails?

C: Yes, not here but yes I have

A: When you did make snail dishes, where did you source them from?

C: It was when I ran a restaurant on the cape for a season and we sourced them actually locally. We had fishermen that we worked with, so we got all of our shellfish, oysters, our lobsters, our scallops, anything. It was way down on the cape. And the guy that I took over, I did a pop up restaurant in an existing restaurant, and he had been there for 20 years so he had relationships with all the local fishermen.

A: And then, last question, would you be willing to serve snails at Figs and Pigs?

C: I don't think my demographic would support that, I would consider doing it for a private party or something like that but. Why snails? Just out of curiosity

A: So we are working with a farm, well we're doing a research project, and we're working with our sponsor doing research trying to figure out local restaurants and how they feel about local food and buying local food, and how they feel about snails. He has a rooftop farm and we're looking to kind of develop a plan for him to grow snails. So he is trying to figure out if this would even be worth it. Like are restaurants in Worcester or Boston even looking to have snails or buy snails, but the way that, well the reason snails are so good, you can insulate the containments and they can live year round. He grows vegetables, he tries to grow vegetables year round but obviously on a rooftop it's cold so you cannot do that in the winter so he's trying to question what he can grow year round without having to build a greenhouse or having to grow stuff inside. How can he have his farm more sustainable and profitable, so we're not selling anything or doing anything like that

C: Yeah that's why I was wondering why snails came up, it's kind of an unusual thing.

A: We're just trying to figure out all of these things and that's like the last thing.

H: We want to see the uniqueness of different restaurants around the area and see if anyone is really interested in broadening their menu you in that way.

C: I think that deadhorse hill would probably do snails.

A: We will be interviewing them soon too.

C: Bull Mansion, they would probably be interested in snails.

Garden Fresh

- Z: What kind of customer demographic do you guys usually see coming in?
- D: So um, the demographic that we were looking for when we opened or the demographic our existing customer?
- Z: Both
- D: So we were looking for foot traffic of over 2,000 people a day. A lot of research points to the fact that any group of people that works somewhere, you know a third will usually brown bag, you have the potential to reach a third, and the third will eat out every day. So you know what I mean, a third run to meetings during lunch or run errands instead of breakfast or dinner for that matter. So you really want to have a significant amount, a pool big enough so you're able to make a big enough profit and generate enough revenue, generating a third of that aspect.
- Z: So do you guys normally have a certain age range that you see coming in every day or...
- D: So because it's a hospital, there's a pediatric unit here, a geriatric unit here, you know, there's end of life service.
- Z: Do you have frequent customers?
- D: We do and they're regularly staff here at the hospital, doctors, nurses, you know different support services here.
- Z: And do you have conversations with them?
- D: Yah we do, we're a small business, friendly place, you know you see the same people everyday you tend to build a rapport with them.
- Z: How do you reach your customers? Do you use social media?
- D: We don't use social media. We tend to be in high traffic locations so you know, the thought is that if there's enough traffic, then that traffic tends to take place during meal times. Unless you're doing something drastically wrong, you'll tend to be successful.
- Z: No, that's a good idea because then you don't have to raise money and time.
- D: Yah, it's a very expensive. And the problem is, we had explored some advertising, and of course the difficulty with that is that you don't know if it's reaching your customer. It's dollar per dollar spent, dollars recovered. There's a significant cost analysis that goes into that.
- Z: Do you guys by any chance have a restaurant association you're connected to with other

restaurants in the area?

- D: We have four restaurants ourselves. So we are a four restaurant group ourselves, Garden Fresh, so we experience some economies of scale in terms of pricing dealing with our legal partners and so forth. They give us a better price because we're more than one unit. But, in terms or restaurant, do you mean a purchasing group?
- Z: Yah, or in, so there are some restaurants or companies that have four different restaurants, or kind of what you are saying right now, or other ones collaborate with different chefs, come up with new creations or events. Have you guys ever done that before?
- D: No we have not.
- Z: Ok, just wondering.
- D. No that's fine!
- Z: What makes your company unique compared to other companies?
- D: So I would say, we're small, we're a small business and able to adapt to customer needs. You know, people often times focus on customer service, or claim to focus on customer service but we have the ability to talk to people, and if people want something, we are able to get it to them in the next day. We buy food every single day, 6 days a week, so if someone wants something and they're in today, we can get it to them tomorrow. You know, I would want a deli to have that type of vegetable or that kind of condiment, or that kind of bread, we can get it to them in the next day. You know in a lot of franchises, there's a lot of franchises in the food business that are becoming very powerful, they don't have that flexibility because they buy off of specific management and procurement. They only have a list they can buy off of; so they're some what limited.
- Z: No that's so cool, I didn't know you purchased food everyday.
- D: Yeah, absolutely we are called garden fresh, we try to stay true to our name.
- Z: Where do you guys get your ideas to develop new dishes?
- D: We go out to eat, we try things, we talk to our customers a lot, what do you think is interesting? What do you like? You know, what flavors? Try to change things, season them. But yah, I think the best thing is to talk to your customers. I think when you have a captive audience, customers aren't going to change much, customers are patients families. So you never know who's going to be in. There is no predictability to know who is going to be in. As the staff of the hospital are the ones you really cater to like the nurses, the doctors, different support staff, they're here every day, and people stay, so you get a good idea from them, and what they want to eat.

- Z: Yah, and so you have that constant link.
- D: Absolutely, and you try to open up lines of communication with our customers and we train everyone that works for us that way. If someone asks for stuff, don't blow it off. If you tell them you're going to have something, have it, deliver. Very simple.
- Z: Do you regularly purchase locally grown products?
- D. As much as we can
- Z: So how often would you say you do? And what is the farthest you have reached out for locally grown food?
- D: So produce we buy locally. We try to buy as much from polar beverages; it's a Worcester base company. Our meats, we're a Boar's head brand deli, so we're kind of limited there. Boar's Head is a national, it's a New York company but they have distributorships in every state and depending on the state there could be 3-4 territories and you basically have to buy from them. Ours is in the town of Millus.
- Z: So does it matter who you purchase from for you guys?
- D: No it does not. The only thing we have to approve is our dietary changes here at the hospital.
- Z: Oh ok, how does that work?
- D: They analyze our menu. So when we first opened they had to do an audit of our menu, make sure nothing was particularly unhelpful. You know, we weren't able to sell sushi or different kinds of meats that were undercooked. Ultimately, we are a tenant of the hospital, St. Vincent's hospital is owned by tenants and if someone were going to get sick, they're going to sue us and also tenant because they're going to go for the deepest pocket. Tenant owns 80 hospitals and is a multibillion dollar company.

Intermission for coffee break...

- Z: So I'm just going to keep on going. So wrapping up with the local food part of the questions...
- D: Is that something you are into yourself? Is that something you are thinking of doing? Is that why you're asking so many questions?
- Z: So the reason why we got this project is because we are sponsored by a local rooftop farm in Boston and they are thinking about expanding their farming into snail farming, so they want to see if it would be a profitable business, how likely are restaurants in the area to actually buy local foods.

- D: I got to tell you, it is an up and coming trend. I think it is a great idea! What's the rooftop farm in Boston?
- Z: It's called Higher Ground Farm.
- D: Where in Boston are they?
- Z: It is right above ... Oh my goodness, I'm going to go this Sunday... it's this huge building. I'm sorry, I'll have to get back to you.
- D: No no worries, let me see if I can find it online, Higher Ground Farm. **Picks up a phone call...** So I'm the catering manager, so my phone rings all the time.
- Z: Oh I see, that's ok! So the farm is over the Boston Design Center.
- D: Oh wow, that's by the sea port right? Oh wow, nice!
- Z: Yah, so it's a very big area.
- D: And it's called Higher Ground Farm. Let me just save that here so I can... So they sponsored this?
- Z: Yes, Mhm
- D: Great, now did you have to apply for this? To work for this or is this part of a for credit course?
- Z: Yah, so our advisors, professors at the university, they were actually finding out about this, and so since they were our advisors, they were like oh, "We know about this project, we were wondering if you guys would be interested." And we just jumped at the opportunity.
- D: Wow! That is awesome! So nice.
- Z: Yah! So it's been fun so far.
- D: And is it a collaborative, owned by somebody?
- Z: So it's actually owned by John Stoddard and he pretty much runs the whole business. He runs all the farming, I think he has one or two people helping him out.
- D: Stoddard? There's a Stoddard trust here in Worcester, is he part of the Stoddard family?
- Z: He might be, I know that his sister is actually a WPI professor but I don't know about their family and if they're part of the trust.

- D: Wow, pretty neat! So yah, to answer your question, I think they would be widely successful here in Worcester. I think they'd be wildly successful anywhere. There are a lot of people into that and taking off.
- Z: And a lot of the research shows this also, we just have to get our own research too.
- D: Right! Oh absolutely.
- Z: So to add on, do you by any chance think that you'd ever make any dishes with snails?
- D: With snails?
- Z: Yah, I know that's kind of out there.
- D: I got to be honest with you, I wouldn't, quick answer, I wouldn't say no but I'd have to verify that through the hospital and our availability to sell something like that. We have other locations we wouldn't have to get that approved, and if there's a market for that, yah! What's the shelf life on a snail?
- Z: So do you mean once you buy it? You can either buy it two different ways. We're doing the research, we're not necessarily selling you on the product, that's not part of the interview.
- D: Oh ya, of course!
- Z: So we could either, the farm could either process it and have it so it is prepared for restaurants or some restaurants do decide to buy the snails live and they do all the procurement: clean it out and then prepare it themselves. So we are looking at both aspects right now to see which would be best for John and which would the restaurants actually prefer. So that's why we through that question out there to you.
- D: Do you know anything about the demographic of people that eat snails?
- Z: I think one of my other teammates had done that part of the research, so I'm not sure.
- D: I would love to get my hands on that.
- Z: Ok! I'll make sure to write that down. And I know it's actually hard to get live snails out in the US so that's why this sort of business is starting to boom a little bit more just because, if restaurants did ever want to provide snails, they'd have to import them from France and those already come canned so they're not all that fresh. But I'll get my hands on that, the demographics. Just the last question. Do you by any chance have any restaurants that you would recommend that source locally that we could contact for research?
- D: Yah, I would say, Meze, it's a Greek restaurant here in Worcester. The other place would probably by Mike Covino, from Niche Hospitality. The phone number for Meze is: (508)- 926-

8115 and you want to ask for Samuel. And you can tell him I told you to call. And for Mike, I only have his cell phone.

Z: If not, I can look him up online.

Niche Hospitality Group

Hannah: Our first question is how would you describe your customer demographics?

Steve: Well we have 8 stores, right 8 restaurants in our group. So I think, the demographic is from, you know we are very family friendly and we go up to scale to all ages of people. And demographics, you know we get all walks really, we are very approachable. Some of the places, you know if you are dining to celebrate an anniversary it might be at Bocado or People's Kitchen across the street which is a little more fine dining-esque. When the DCU fills up we are jamming here, it's like music, who likes that music, everybody likes that music. Our approach is to appeal to all demographics, some restaurants are more everyday and accessible, some are more special occasion, weekend oriented. It's Worcester, so you you know, we are not shooting for, you know we are not a fine dining establishment you know we have the Fix Burger Bar right over by WPI campus right, that's us. You know, everyone eats burgers. It's really student, we love having you guys and the students there. We bring a lot of families there and there's doctors offices and things in that and those people come in for lunch at the salad bar and they get a burger too. We try to make it really accessible to everybody, we are not shooting for one certain niche group or anything like that.

Travis: Yeah that makes sense, with all the restaurants out there, just trying to get everyone possible.

Steve: Yeah, we're different themes but you know, like Mezcal is more price point approachable. Burger bar is more price point approachable, you know you get like a 12 or 14 dollar loaded burger and everything over there. Where at People's Kitchen of the Citizen here, you get a pre-fixed dinner and it's 42 dollars, you know or you get a steak that's 35 dollars, you know so different price points are going to appeal to different things, and you know students typically aren't going out and getting 35 dollar steaks, right? Let's go get a 10 dollar burger and if we got a deal going on, let's go watch football here when we're doing free wings and things like that. It depends on that.

Travis: Do you have that?

Steve: Yeah, during football we do that. It's like \$10.99 all you can eat nachos and wings every football game. So that's a good deal. That's at the Fix too.

Hannah: Do you have any personal conversations with your customers, do you get to know them?

Steve: I know a few of them, I'm the chef of the company, I'm one of the partners, one of the owners. I spend a lot of my time in the back, I think customers more know me than I know them. There are a few, when I come out and talk to, that have been coming to our restaurants for years so I do have interaction with them. And we do wine dinner events, like we do a test kitchen event here, where we actually cook in front of 30 people and it's like a wine dinner. So they are right there and come up and talk to us and really interact then. So the answer is yes, I'm not out every

night cruising the tables and touching base with everybody but I do talk to them quite a bit. And we are real accessible, if people have questions about that, we always give out our emails if they want a recipe, if they need to ask something or things like that.

Travis: So with the \$10.99 deal, to branch off from that, I've never heard of this before but how do you advertise yourself to everyone. Do you use social media?

Steve: We use social media. We actually have a woman here, Sam Manzello that is our social media person. So she operates our Facebook page, twitter, Instagram accounts, and posts, things like that. She also travels around some of the local hotels and businesses and talks to the people that are maybe booking function or things like that, concierges and things like that. So on the social media, we do a lot of that, we have our website and we post all our things. We have an extremely high end website, we have a person in-house that runs that website. Actually, he does all of the design to our menus, and prints our menus so it's all kind of wrapped into one. He does all of the creative on that. And then we do radio advertising, we do billboards in certain locations, we do print advertising. The budget for advertising is huge, if you wanna keep growing, you need to advertise.

Travis: Is there like a subscriber email list that you sent out to people?

Steve: Yup, so we do email blasts. Like I mentioned the wine dinners and things like that. We have a beer dinner coming out, a wine dinner at Bocado on Monday. We do email blasts, with New Year's coming we get all the menus that we are going to run for New Years and we will do big email blast, there's thousands of people on our email list. And we will do that blast, you know "Make your New Year's perfect." It's gift card season now, we'll do gift card blasts, a lot of gift card sales.

Hannah: So you did mention that it's 8 restaurants, so are you guys part of a restaurant association or a network?

Steve: No, we are a group. We are the Niche Hospitality Group, that's the formal name of our company. We've got 4 restaurants in Worcester, Mezcal, Bocado, People's Kitchen which is on the back side of the DCU and we have the Fix Burger Bar. We have another Bocado in Wellesley, MA and in Providence, RI. And another Mezcal in Leominster, MA and then we have Rye & Thyme like an American tavern with oysters, a wood grill and things in that in Leominster, MA. So 2 in Leominster. Yeah we just started out with one restaurant years ago, and slowly kept growing. And some concepts are more easily replicated, Mezcal works, Fix Burger Bar, there's been interest in different towns approaching us like Marlboro and MetroWest, it's nice to have a Fix Burger Bar over here. So those concepts are reproducible.

Hannah: So do you guys collaborate outside of your restaurants or within your restaurants? Like do you collaborate ideas with each other?

Steve: With each restaurant? Yeah, we have weekly manager meetings, you know for overall management and you know so it's a business, you know we look at numbers all the time. We

have a meeting tomorrow morning, 9:30 all of our management comes, we do a printout of our sales reports and we look at food costs, liquor, beer, wine costs, labor costs, all of our budgets, so we have budgets for labor, budgets for food costs, so it's a business, so you know "hey it's a restaurant!" It's a restaurant right, so believe it or not, the restaurant business everyone thinks isn't a very profitable business, if you make 10 cents on the dollar, when it's all said and done you are a very successful restaurant. As opposed to who knows, a retail or service oriented places, where margins can be 40% or so, we're 10 cents or less on the dollar, it drops to the bottom. So you know, it's a lot of work, for what we make. So yeah, we collaborate and the chefs will get together on food things, you know the guy walking around here is Shea, he's our director of coverage, so he works with all the bartenders, right we have a big craft's cocktail program, wine program, the beer movement's real strong so you know the Fix has a great program, Rye & Thyme has a great beer program in Leominster. So the key in the business is the communication. If we have an issue or a problem, the root of it ends up being, you know what if we have communicated better, we could have avoided 90% of this. It's probably the way of life. I'm the same way with my kids, one's graduating college and one's at UMass Amherst, if there's a problem, you didn't talk to me, it's communication. It's key to success.

Travis: Yeah communication is key everywhere, I've learned that over the summer working at UTC. Communication is very important.

Steve: Yeah you can't assume someone knows something, you can't assume they're doing this. It's like let's make sure we are all on the same page. Sometimes it gets repetitive. Again we have some foreign workers, you know, Brazilian, Salvadorans, and this woman Natilana been with me for 14 years, she's worked with me, my right hand man kind of, but she's Brazilian, she speaks great English. We'll talk back and forth and people are looking like "she's not dumb" and trust me I can say something and she'll say she understands and then we do it and she says "oh I thought you meant that." So, even though there's sometimes a communication gap, or something like that, it's key to make sure you're all on the same page.

Travis: So now going to the restaurants here locally in Worcester, what makes you unique/different from everyone else?

Steve: I think it's two-fold, some concept driven, this is Mexican/Southwestern, so it's unique in that respect, Bocado is a Spanish tapas wine bar, with Spanish and Portuguese wines so there's now French wines, no California wines, it's tapas which is small plates, a different way to eat. People's Kitchen is not such a niche on the theme and concept, and the burger bar is just a burger bar that sells good burgers, I think you know we have a commitment to hospitality, which you know, is taking care of the guests, and internal hospitality with our people. If the people are happy, you're going to see it when you commit. If you sit down and your server is grumpy, or whatever and not taking care of you, we take care of our people and they take care of us. It's full service driven, a commitment to excellence and hospitality. We've been good at that and that's how we are able to grow with our concepts. But your food is gotta be good, your atmosphere is gotta be good, you know you gotta stay current, that's a big key right now. This menu, we have been open for years with Mezcal, and we just did a big overhaul with the menu, like 80% probably changed and it was a big endeavor to do that. People are like how come, you know to

stay current, trends change, things change. So you stay current with the food, with the cocktails, like here we just changed the menu, there are actually gonna be some booths put in right here, to get maybe a little cozier feeling. Sometimes it feels more cafeteria and warehouse like because it's a lot of glass and it's the garage and the concrete. Different lights we are gonna put in, different lights, a different wall to close up to make it a little more intimate when it's a slower Monday night or something. With Bocado we are going to do a new renovation because that building is 10 years old, it's getting tired, you know, maybe new floors, redo the bathrooms, reconfigure the bar, so you gotta stay current. It's like your house, at home, "did you paint your house?, no I just let my house go, all the paint peeled and it looks like crap" you know, so you gotta stay current. So pretty much all those things to run the business, you know and make your guests feel welcome, when they leave you always make them say "wow that was great I can't wait to go back" not like "yeah it was pretty good" you know, a lot of others are repeat business. So that's important. When the DCU fills up, you probably get a bunch of people that will never ever come here again, you know or maybe 5 years down the road, "oh yeah i think we ate there when we went to that show, yeah let's go back, i liked it." But day in and day out, our repeat customer business is what it is.

Hannah: Our next question is, do you regularly purchase locally grown food?

Steve: We do quite a bit of locally grown, being in New England, I always laugh you know if you look at a cooking magazine Bon Appetit or something, when it's April or March issue, in the spring, they'll show you flowers and fresh asparagus and you're reading it and you look out and see 2 feet of snow. You know so we live in a different environment, a different geographic area where the winter months are tough to get locally grown. Like right now we are all into getting our butternut squash and winter squashes and brussel sprouts and we like cooking with those things and using those things, so we'll use local stuff, in the summer we use local farms for that stuff, we use apple field farm, we use breezy gardens farm, I think is in Spencer. The Fix has the grass fed burger, is a locally sourced New England family farms burger, so they are a co-op they have different farms they deal with that are certified grass fed, so we do that. One of the tricky parts of local, is the commodity products that use so many, like let's take steak, everyone wants a filet, or a sirloin, but there's only so many cows locally that you can produce that from, you know we'll buy whole animals and do wine dinners and things like that and we go a lot more local. Something like here, with tomatoes, it's tough to use that many tomatoes because we make our own salsa, you know so sometimes the pricing is tough to work with too for certain things. When we do like monthly specials, and our wine dinners, we try to source locally as much as we can. The funny thing is at Bocado we do a fried goat cheese, it's like our most popular item, it's just breadcrumbs and you know we fry it quick. It's a great product, but I remember talking to the woman at West Field Farms, I think it was goat cheese, I believe it was a couple years back, love your product, we know we do a fried goat cheese, I'd love to do it, she says how much do you use, I said 20-30 pounds per week maybe, that might wipe me out in 2 weeks. You know what I mean, so there's a volume perspective too. So, we are big on the local when it's season, it's a lot easier for us to do. Certain meats we do a lot of, you know we do the grass fed and locally braised, and our special events and special menus, we definitely try to do it. It's an ongoing process, it's the movement now, we're into it.

Travis: Yeah of course, trying to stay with the current.

Steve: Yeah, you wanna do it, it's a new thing, it's good for the environment, it's good for the local people, you know it's like at home with my wife and I, where do you wanna go, let's go there, I live in Millbury, so let's go buy it there, go down to the hardware store and buy it there instead of going to Home Depot because it's a local store, we want to support our local stores. It's part of my personal culture, is to be local and do that too. On a similar topic, one of the things I've been trying to work on is a big thing coming about, is food waste like a supermarket, wastes 50% of their food, they call it ugly fruit and vegetables now, like everything has to be pretty to sit on the shelf and 50% of that is dented, like if you grow squash it's dented, or your peppers don't perfectly look like bell peppers, but they still taste the same. So I've actually reached out to a couple of our vendors to say can I get the ugly fruit? We're chopping it up and cooking a lot of things, I don't need it to display it, so that's the thing I've read a couple articles, supermarket's can put in their order and like 2 days before if they have 4 tractor trailer trucks, 2 days before that, and no they say we only really need 2, and the farmers are stuck with that product and really have no where to unload it sometimes and it gets thrown into the trash so it's like 50% of food waste, it's a crazy number and I hate waste. Like at home I don't waste anything, we recycle, all that. So you know, aside from going local, I think the waste thing is a real big thing to look at.

Travis: Definitely, yeah for sure.

Steve: Like even in the city, we talk to a lot of restaurants and like the food bank there's so many laws. If we have a big function, and we have leftover food, a function on the 15th and you make all of this food, and you've got leftovers, it's all perfectly good food but you can't just go have the food bank come pick it up, they say no, and we end up throwing it away. Those laws are changing where we can, help the local community in that way.

Travis: Yeah that's great. So I know that you said that over the past few years you've changed the menu, how often do these menus change would you say, is it just depending on the time?

Steve: Well they are different for different concepts. With People's Kitchen, has a main menu for their upper dining room, it's got like 5 appetizers, 5 entrees, and a couple of signature steaks. Those change every month, it's on a rotating basis, what's current, what's seasonal, what's local. So that restaurant really lends itself to "I'm gonna put this on the menu, I'm gonna run it for a month, I know it's in season, I can get it locally no problem." Here we do weekly specials but the main menu we'll change probably 3 times a year, not as vastly as it did. But we'll change items, how many of these do we sell, what's resonating, we talk in the meetings, what're the guest perceptions on certain food, so we'll change it to stay fresh and current. Same with Bocado, we do monthly specials that we change, like 6 tapas and a couple of other items, and then every couple months we'll say let's change a couple of them. One of the things I mentioned too was your core of repeat customers, they come back cause they like certain items too. So if you just change on a whim all the time, cause you wanna change it up, I remember we have people come and say "we used to love that mushroom and goat cheese spring roll, that's why I come in." And then we say "we don't have that, we have something new: and they say "well I like that" and

"well we don't have that." and that's one the reasons you know you have your favorite foods where you go eat. You know it's like that Wonder Bar pizza place over on Shrewsbury St. it closed for years and it reopened, they said it's all the same and we go eat the pizza, and my family says "yeah its good, its not like it used to be." But we used to always go to the Wonder Bar, cause we just loved it and now it's a little different, we're like "yeah it's good but there's other good pizza out there too." People go to a place for a certain thing, so change is always good but you gotta be cautious.

Travis: Some people want the same thing.

Steve: Yeah there's some main stays on the Bocado menu that can never take off, like the fried goat cheese. [People will say] yeah that's why I come here, I get the fried goat cheese, I get one of the tapas, and my friend and I get a glass of wine. But we do change it, some are major changes and some are just sporadically over the year.

Travis: Just of curiosity, have any of these changes, not here or from the other restaurants, have they ever had something involving snails in it?

Steve: With snails?

Travis: Yeah, escargot.

Steve: Ummm, I think we've run escargot maybe as a special or something before but I don't think it's ever been a menu item. Why you have snail fetish?

Travis: No no no, it's actually just part of our project.

Steve: Snails are?

Travis: We're trying to help our sponsor, who's trying to grow local foods on a rooftop farm in Boston. We are trying to get a feel for the marketplace to see if there's any particular area within Worcester or Boston that might have an interest in locally grown snails.

Steve: And he's growing snails? Yeah we can serve them and try them, you know like at the People's Kitchen, that would be a venue for us to try them at. We could run a special, and other places we run a special for 2 nights, Friday and Saturday night we buy a small portion then we can try to go in and sell them. That's something we would try for sure.

Travis: That's good to know.

Steve: Yeah, even at Bocado, something like that where we could just run it as a special, a small tapas. The nice thing about tapas too, if you run it as an appetizer, they're not gonna spend \$25 on something they've never had, but you'll spend \$7-\$11 to try something between two of you, you know. "What's your meal? You gonna get snails?" "No, I never had them I'm not taking the chance, I'm gonna get the steak or a piece of fish." "Wanna try an app? I've wanted so long to try

it." "OK lets try it." And then people find out "Wow I love them!" You know, so it's nice with a small plate, it lends itself to people being a little more you know risk-taking and adventurous.

Travis: I think our last question is would you happen to have any contacts, that would be interested in locally grown foods within Worcester or Boston possibly?

Steve: Who has locally grown that you can talk to, you mean? Yeah I would have to get their names to you but I know the Apple Field Farm will probably talk to you, our chef Neil is good friends with him and have used them for years, so he would be certainly willing to talk. We use locally made pretzels in a few of the places, that's Twisted Pretzel and their in Grafton. It's locally made, it's not grown, but it's locally made. So that's a local product. We use Dole & Bailey, it's where we get our meat from. So our rep there would be willing to talk, to tell you about the New England family farms program. And he might be able to put you in contact with someone from there as well. Do you guys have my email?

Travis: I think our partner does.

Steve: If you wanted to send me an email, just say hey remember we talked, can you track me down some info. I'll get that to you.

The Hourly

Christian: Hi this is Christian, how may I help you?

Zulean: Hi Christian, this is Zulean. I called the other day.

Christian: Yes, how are you?

Z: Good! Good! I'm the Worcester Polytech student that called you on Tuesday.

C: Regarding the interview about the restaurant right?

Z: Yes, yes. How are you doing?

C: Ok! Very well just looking for your email. You called on Tuesday right?

Z: Yes

C: Ok, I got it. I'm ready!

Z: Ok! This time is still good for you right?

C: Sure, yes. So, the project is regarding local restaurants and how we use local resources, correct?

Z: Yes, and if you guys source locally for your food, and just expanding into different questions.

C: Yes exactly, let's go through because your questions are very good in order. So what is your customer demographic? Well we just opened so basically, when you open is different than when you have been in the business for a long time; you don't have too much data. So demographic right now is I would say, everybody. We didn't determine the prices based on demographics when opening. Our target is a businessman for lunch or a business women and tourists. At night, it's more like the neighbors and people who drive to the place. The square is a little empty at night with the business. At 5-6 o'clock, we have a little bit of business side: bankers, faculty people coming up, students for a drink or quick bite. After that we switch to more you know, residents who want seafood and regular people that are coming. SO demographic I would say earlier 30- 50 years old. That is the major of our cliental right now.

Z: Perfect, and I just have a couple more questions on my own notes, is that okay if I expand on the questions?

C: Yes, of course!

Z: Do you guys by any chance have personal conversations with your customers? I know you're

new but do you have any frequent customers coming in?

C: Yah, of course, this is the base of a business. We try to have a quick discussion with them, just to get a sense of what they are looking for when they get here, and what we can do better. Especially when you are a new, you have a dream better when you open but when you open, things you were thinking are not suitable, or not delivered how you want it. It is very important when you open a new facility that you adapt and act as quickly as possible. You know and not determine, "Oh my idea is this..." and not move from there, "Doesn't matter what the people say," and not changing. So the way to do that is to have an interaction with the customer and to listen. Listen what the customer has to say to see if there are any trends. For example, if a dish is good but too salty. If you have one that guy is sensitive to the salt, but if you have a trend of a lot of people pointing the same thing, maybe you, "Oh I have to look at the dish and its salt." But this is just an example, I can give you. Same thing with the local people. Most of the time you have your provider and customers that have a friend who grows his own oysters in the Cape; they are fantastic. Oh perfect! Give me their name and contact information and I will try to see if they want to deliver to us. You know it can be on both sides. It can be talking with the customer, how you can improve your menu or how you can improve your service but also, have some resource that the customer is bringing to you. It's good!

Z: Oh good, good. So if you don't mind, we're going to go onto, how do you reach your customers? Do you use social media? Or maybe email?

C: Yes, yes we use social media. In today's world, in this century, we use social media. We have Facebook, we have Twitter, and we use Instagram. All of these kinds, with my kids, we were able to talk to you and me, I try to adapt myself to the new world. Not that I'm old, but the technology goes so fast! But yes, we use these. We also use tools like Open Table. Open Table is not only a reservation app, it is also a tool for you to see who made the reservation, what is the demographic of the people who are coming, what is the age, what is the social thing. So it is not just only the social media that you use, you use also the tools that you have to make a reservation. Most of the reservations, I'd say 90% of the reservations now are made online and on a website. So, there are tools because they analyze ok so this person from Cambridge wants to make a reservation. So you know, they are a neighbor, or, this person from Texas, checked your restaurant and wants to come. We have some people that are traveling and want to test our food. So this is most of our information that we get. It is not only through social media but it is also the tools that we have; or even the website, like Yelp, where people can comment and critique. It gives us information regarding, who came to our restaurant or what kind of people are the ones coming to our restaurant because we receive a report every month by Yelp that say, 890 people who checked your website. A few looked for the money, 10 percent look for the direction and everything. These are also tools we are using when looking at our customers.

Z: Oh good! And this segways us into how do you advertise? You said you used tools like Yelp. Do you by anychance buy print add or any kind of advertising.

C: No we don't. We um, I think uh, the add market, it's assuming it works but it doesn't have enough impact. I think it's a waste of money. You can reach people a better way and more

directly than putting a banner up theoretically. This manner, when you click, it has a timing. This means that you see the ad for two seconds but every three hours or every ten minutes if you pay a lot of money. So it's a lot of money but if your guest is changing the page very quickly, you don't have a chance to see you add. So it's a missed opportunity. On the paper media, unfortunately we're moving away from the traditional paper, newspaper, or magazine, or something like that. And it is getting so expensive, it is it doesn't make sense to pay \$1000-\$2000 for a quarter page per month; this turns out to be a \$10,000 to \$12,000 a year, that is a lot of money. So to add that on a monthly basis, if your rent check is maybe I don't know, \$20, and you have \$1000, you calculate how many customers you need to reach to at least break even on your investment, and after that you have the cost of the food, the cost on the rent to add. So I think strategically, you can do a better job by using social media, targeting exactly the sort of people you want. Reaching the bottom line, the best is reaching your customer when they walk in by welcoming them and ask them to bring more people. By serving good food, good service, they will be coming back. If they are proud of what they are eating, what they are being served, they will reach out to more customers. This is the best advertising you can do; the one inside your restaurant.

Z: Got you. So, another question we also have is, is the Hourly a part of a restaurant association. Are your chefs or do you collaborate with other restaurants in the area?

C: Yah, we are part of the Massachusetts Restaurant Association and we are also a part of the Can Reach, Harvard Square Customer Association. We have a local label if you want and we have Harvard Square, Cambridge, the Greater Boston of Bureau member, member Restaurant Association of Massachusetts; so we have different labels. And this can help us because they have so many resources to share in their data and they can promote us indirectly but it's a good cost for the year. So this is good. But they also have rosters in Massachusetts Restaurant Association. You know if you have payment problem, legal problem, healthcare, they can help you. So it a good thing to be a member of this association.

Z: Oh wow, good. So I guess we'll go into the next question, what in particular makes the Hourly unique? If you were to pick anything about this restaurant what would make it unique compared to other restaurants?

C: We are unique because we are serving 8 different kinds of oysters and on the 8 you have the 6 that are locally grown in the coast of Cape Cod. So this is makes it unique. A lot of restaurants have fresh or rubber, but they sell shoe oysters but most of the time, it's the oyster they bring from you know, the west coast or the south, where there is warm water. Us, we are focused on cold water. We have Shoe because it is by the Prince Island because it is local but we have 6 that grow directly in Cape Cod and on the West Coast (from Maine to Cape Cod).

Z: Wow, cool!

C: So this is what makes us unique and we are so close, that the freshness is almost unbeatable, that bringing oysters doesn't make any sense. Yes, it makes sense for someone who has a few items with oysters and pay attention of the costs. it doesn't matter what you do, we are paying

locals, even though they are local, we are paying more for our oysters than some that were from the south, where they grow in the warm water. At the ration of the system, but yes, locally, and because they are independent of some producer, we are paying more for this but the quality is 100% much better

Z: I see, you have to weigh your pros and cons: do you prefer local and ensure quality or cheaper.

C: And you want to support the farmer from Massachusetts and not, not that I have anything about North Carolina or Florida, but there are people here that can also bring you customers. "Hey I sell my oysters at the Hourly, you should check out this restaurant!" Versus the guy in Florida that is a big producer and doesn't care unless you buy a minimum of 500 oysters per week. They don't care much who will be serving and stopping at your restaurant.

Z: Yah, so where do you find your inspirations for finding new dishes?

C: Oh, this is the chef! The inspiration is you know, she is first locally from Boston, but has been in France for 10 years. So the inspiration comes from her traveling and exchanging the idea with other chefs you know and came with the food. So the inspiration is based on our theme, the sea food, she works with that.

Z: And do you believe you chef is experienced in making a divers type of food? A diverse array of food, excuse me.

C: Sorry?

Z: Um, do you believe your chefs are experienced in making like a divers array of different kinds of food?

C: Ah, yes yes! Also, you bring back to the first question about our demographic. You know, everything is related. The chef creates their own menu, and you have to think of the chef as an artist. You don't ask Picasso to draw or change his drawing. You either like or dislike a piece of art; the same thing for food, you like or you don't like. The ability of a chef to adapt to a demographic or a type of customer you have, this is something very important. If you have a certain chef who doesn't want to change anything, and continues to do the same dish even if people don't like just because of their own ego, and want to do it this way, and people don't like it, it doesn't go well. But if you have a chef with and open mind, and has experience to do cooking, and the more experience you have, and more diversity experience you have, the better it is. So if you have a chef that is local, and never had any chance to travel or do exchange with other chefs, or time to see other types of cooking, you will be limited on his equation. Versus a chef that is traveling and has different experience of cuisine, different experience of establishment in like this, will have more credit you know. So this also pays a lot on the bottom line of the restaurant, it's how you pick up a chef.

Z: Ok! And do you believe your customers have expressed desire for new dishes? Or is it more

like the chef is coming up with new dishes and sometimes the customers come back and are like, "Ah do you have this dish..."

C: Well I think this is a good question in a sense. The customer I think has an expectation that every 6 weeks, we are changing the menu.

Z: Oh wow!

- C: Yes because you work with the season. A menu, a long time ago, you had a chef was changing the menu 4 times a year: spring, summer, winter, and fall. Now we do with a possibility of the food traveling, importing or exporting over a country like the United States, faster than it used to be before! And fresher than before. You can pay and have an early fall menu or you can have full fall menu, you can change your menu like 8 times per year very easily. Before you were changing the menu, but you were changing the entire menu. Now what you do is you change 2 dishes at a time in a function of what you receive, what is on the peak of the vegetables, of the meat, or the fish. You change a few items at a time. If you look at the big picture, yes, we are changing the menu, maybe 8 times. But the menu is consistently moving in the function of what we receive and what is the freshest on the market.
- Z: And so we are getting to the end of the question. I know you guys source locally right, with you oysters, but how often do you guys source locally grown food? Do you have it come in every week or every day?
- C: Oh ya! Ya, no, every week. I would say in the summer, every day.
- Z: Wow
- C: Like for example, the oysters, we have constantly, not the same provider, but come in everyday, Monday to Saturday. The lobster, we have it delivered from the Cape every two to three times a week. And to keep this very fresh, we have a lobster tank to hold 300 lobsters.
- Z: WOW!
- C: Ya, 3 and a half, 300, I mean if you are in the square, in Cambridge I will be happy to show you!
- Z: Yah!
- C: To see how fresh we have. We don't order a big quantity because we want to turn over very fast. And the faster you turn, the fresher you have. So the tank, it doesn't mean the oyster can live forever. It gives them extra life.
- Z: And so what is the farthest you have purchased for you local food?
- C: So we have lobster, everything that is sea food, is grown locally. We have lobsters, oysters,

clams. This is the seafood portion. Locally, we didn't start yet, and for a reason is, you know for example, vegetable and all these salad and everything. We are waiting for spring. And the reason why we are waiting for spring is because we are going, we open late, so we opened two months ago, and it's already the end of the season for all of these items. So it doesn't make sense to start with this. We have one but they are not locally grown. After that we're looking for farm like Driming Farm in Lincoln, or Brue Erron in Lincoln, The Old Farm in Cambridge, Concord, for vegetable, tomatoes, all these types. The only thing that we don't, and it's because MA is not a big producer is meat. This is not our focus. I'd say 80-90% of our menu is seafood. We have burgers, chicken because people asked but if not, we don't really have meat on the menu.

Z: Ok. And so I know you had already answered that you change the menu every 6 weeks or so one or two dishes.

C: Sorry, we are still on the discussion to change. I think The Hourly will be changing the items next week.

Z: Oh wow! Are you guys ready?

C: No, not yet. Well, yes and no. The chef has a menu and it has been approved, so now we are on the stage of, for example, today we decided on the idea for the menu, now we are on the stage setting tonight, to test it. So the rest of the week will be testing, finalizing the ingredients, the costs, everything before we put it on the menu. So by next week we should be able to put it on the menu, yes.

Z: And so I'm just curious, have you guys ever made a dish with snails or thought of making a dish with snails?

C. With what?

Z: With snails?

C: Snails? Earth snails or sea snails?

Z: Yes, both.

C: Well sea snails, I don't believe. The other one, we are talking about to do with snails, yes.

Z: Oh very interesting.

C: We are thinking. I mean on my previous restaurant, we were serving, since it was french, we were serving escargot, so snails, everyday. And we had them coming directly from France.

Z: Were they canned already?

C: Ya, we didn't find any quality growers. I'm sure they have one or two around here but the

quality we wanted was not there. And it was very bitter. It takes time for a snail to deliver, in the sense of the enterprise has to be for a long time. The snail is very bitter and very rubbery. But ya! It's something we are considering. Ya why not?

Z: And the last question we actually have for you is, do you have any recommendation as to maybe other restaurants in the area that do source locally?

C: Well, locally, yes I have some recommendations because we are part of a group. Yes, we have Park Restaurant, we have Grafton St. Restaurant, we have Russen House but it serves the same type because we share our producer when we have something that is very very good, we share with our sister restaurants. Number One in central square but I know they grow locally. The pick up is on Little Donkey, in central square. I know that they have. And you have a famous one, Gridion, on Main.

Z: Ok.

C: Besides the restaurants in our group, these are the two that I would defenitly roomend who have locally grown produce and meat and fish.

Z: Awsome! So that is actually the end of our interview!

C: Thank you!

Z: No thank you!

C: If you need more questions, don't hesitatte to call me.

Z: Oh thank you so much! And I wish you the luck with everything and good luck with the new menu!

C: You too! Good luck you study!

Z: Thank you Thank you.

C: Your welcome, bye bye.

Z: Have a great day.

C: You too.

Sole Proprietor

- T: We only have 6 or 7 questions, we don't want to take up to much of your time. You're kind of busy here so we'll try to be as quick as possible.
- Z: So we were just wondering what is your customer demographic? Is there a certain age, gender that you guys see? What is your demographic?

Sole Manager: Well we have three restaurants. The demographic of the three restaurants actually is different. We tend to have an older demographic here, this is the oldest restaurant. Will be 38 years here in the next couple of weeks, so a lot of our customers that started with us as younger people, you know, are not in their 50s, 60s, and beyond. So depending on the time of day, the demographic changes, at night with the school next door obviously it gets a little younger. But you know on a Saturday night for example, sitting here, I would say there is a lot of people between 45 and 65 years old. If you go down to the chophouse, which is our steakhouse, you're going to see a lot of people between 35 and 50 years old. And if you go to VIA, the Italian restaurant, there tends to be a lot of families. And a lot of younger, in 20s and 30s in that restaurant. All three restaurants have a spread between 25 and probably 65, but this clearly has an older segment. Chophouse has seemingly the middle segment and VIA tends to have the younger segment.

Z: Do you guys have personal conversations with your customers? Do you have frequent customers coming in?

Sole Manager: All three restaurants have a very high repeat customer base. So we know our staff, managers know many many customers by first name, their name, their kids names, their kids names. I mean that's very much the case in all three restaurants.

Chef: We also even keep track of that as well. We know, somebody's favorites, dislikes, experiences. We gather all of that information, so we have it at all times. So you can have, you know we have a pool from the bank sometimes, instead of remembering. But yeah we pretty much know, like I know I cook meals all the time for people that are "oh such and such is here" and they can just modify for that person's name instead of what they're like. The same thing with drinks.

SM: It's also the admit of OpenTable, a computerized reservation systems, now you log in and it holds that information. So if you come in and we don't even know who you are but you say "hey can I get a quiet table in the corner?" You know, when they make that reservation, that'll be a note that will be in there. If those people book a reservation again, even a year later, that note pops up. So we may look at it when we're booking it and say "so we noticed the last time you were here you asked for a quiet corner, is that what you're looking for again. And then anything, diet, particular likes, dislikes, you know all of that gets recorded now.

T: Very personalized for the customer. And that's at all three?

SM: Yes at all three.

T: So you said that the sole has been here for 38 years, so it's very much kind of word-of-mouth how great this is, but how would you mostly advertise to new comers, like college I know you said you have a night life. But how do you know how to advertise to everyone around you.

SM: Well our, the majority of our marketing dollars we put in the billboards on the highway. We've done that since the early 90s. We also do a fair amount, a lesser amount of marketing in print. And we are now embarking on in January, we will be releasing new websites as well as a full social media. We do communicate through the schools as much as we can. They minimize your ability to do that because of privacy issues that they have for students. So clearly for your generation, social media is going to be the route to do it. We're embarking on that between all three restaurants, particularly a focus here because of our proximity to the schools and the fact that we need to engage the next generation, the younger generation on what this restaurant has to offer. We skew much older, so it's a focus of ours to communicate with students and the younger generation. If you have any ideas on that we would love to hear them.

T: It's good seeing you are getting into social media, I think that's pretty much the best way to do it. Personally I use Facebook, twitter, its the easiest way to communicate than getting on the phone.

A: I think most of us really go to late night Sole a lot.

H: Yeah, I was just going to say that that is the popular thing for us.

A: At the end of the day we say "oh let's go grab a bite to eat oh the Sole"

A: Are you part of any restaurant associations?

SM: Yes, we are a member of the Massachusetts Restaurant Association. I actually serve on the Board of Directors. And being part of the Massachusetts Restaurant Association, you are automatically a member of the National Restaurant Association so thats the national association with state affiliates. Its NRA and the MRA.

T: And with that association, do you sometimes team up with other restaurants other than the three main ones here?

SM: I guess the answer is yes, for example we did a fundraising event at the beginning of April. The name of the event is called "No Kid Hungry," that is a national organization who teams with the 50 state associations and the NRA to sponsor various fundraising events under the banner "No Kid Hungry." It was formally known as "Taste of the Nation" and it still exists but this "No Kid Hungry" is their newer effort. So we did a dinner, a five course dinner at the Chophouse, the steakhouse. There was like 165 people and we invited, I don't know how many chefs you worked with.

Chef: There was, so it was our group Sole Proprietor, 111, and VIA, Richard Romaine and his group from Romaines Smokestack BBQ from Northborough. Bill Grady and his group from Sonoma in Princeton. Alina from Sweet. And then the Niche Group, Mezcal, Bocado. We all came together as one and put out individual courses for this dinner.

SM: So in that regard, that is the first thing I think, you know where we really reached out to do that. It was the first time that sort of thing has been done in this area for a long time. We've committed to do this again. I think something else that is also going on that is not in any official capacity at this point, but a number of local restaurants have been meeting together to talk about how we can maybe get a little more awareness about what is going on in Worcester with all the restaurants. There is a lot of new younger guys that have moved in, they moved into the area, specifically for what you seem to be looking at. From an availability of products, that type of thing, that's one of the reasons that they've come this way. A lot of these younger guys kinda have experience in Boston and New York. In their own operation, when they've looked at how to do it. Worcester is a more affordable market place, the other thing they've talked about is, while that they're looking for local products, it always seems to come from the middle of the state because we have a pretty strong farming community around here. Said so, I can start paying \$100 a sq ft in Boston and I can pay \$20 a sq ft in Worcester. And I'm closer to the source of the product that I want to work with, so a lot of younger guys have come out here and are starting to open up restaurants. And these are guys that have worked in very successful places in Boston and now are bringing that out to the Worcester area.

H: So in between the three restaurants do you guys every collaborate with dishes, ideas between the three restaurants? Do you guys bounce back and forth ideas?

Chef: We do. We meet once a month, all the chefs amongst each restaurant's all come out. From upcoming events to wine dinners, beer dinners. All three restaurants run promotions from time to time. Crab, you see buster on the roof, the lobster promotion. We do promotions all the time. So yeah we do bang around a lot of ideas amongst ourselves. We don't generally share same ideas on each menus, but we do all talk about it and collaborate amongst each other.

H: And then with each restaurant, what specific dishes are unique to the restaurant? Are there any specific dishes that are unique to each restaurant?

SM: Again, I don't think that there's anything outside of, eliminating steak, grilled or broiled fish, lobster, the menus are all different. So everything, if you look at the menus there's nothing the same. So this salmon, that you can get grilled and then on the chophouse menu that you can get straight, a composed dish, which would have salmon and other components on the dish that would exist there and the same at VIA. And then the salmon dishes on this menu, but none of those dishes are the same. They're all different.

Z: So just thinking about each individual place, what if you were trying to say, why does the Sole unique compared to other restaurants in Worcester, why is the Chophouse unique, what specific aspects make this restaurant unique?

SM: I think the protein is what makes it unique. This is a seafood restaurant, you know there are other, I mean every restaurant has seafood on their men, but you know 98.something percent of our sales comes from seafood. And, you know I think that if you look around there aren't a lot of restaurants in the marketplace that specialize in seafood so we do. Chophouse specializes in steak, to that end, you know they handle mostly prime product. They do all of their own in house aging, probably are only, there's probably only one other restaurant in the market that I can think of that works on the same caliber and that's in Shrewsbury, Willies. So again, every restaurant has steak and meat on it, but they don't specialize in steak. VIA is probably the one that has the hardest time differentiating itself because it's an Italian restaurant. I can tell you that, my wife and I spend a lot of time traveling in Italy, went to cooking school in Italy and the idea of that restaurant is not that it's an American Italian restaurant, that it is a Italian restaurant where we took most of the best of what we ate and saw when we worked with chefs in Italy. And tried to bring that back here to Worcester. Now there's been some good parts of that and some bad parts. Because some things that they do in Italy, people in the United States aren't all that used to, so there was a little push back from that when we first opened. But I think generally speaking, that restaurant has established itself. I think between decor and the way these guys do the food over there, from what other restaurants are doing.

Chef: I think what also really sets us apart is quality. Like he said, they specialize in fish, Rob has been buying fish for almost 40 years now. So he has a great relationship with the fishermen and the people that get the fish right of the boat. He knows what's going on, bring fish in every single day. The other restaurants buy fish from here actually, so we know it's fresh. Downstairs we have coolers that literally grinds and makes ice for us all the time. Everything is covered. Nothing is, not old, but you know some restaurants you might find a few days on them, nothing lasts more than 1 or 2 days here because we have fresh fish coming in. Steaks we buy the best steaks that we can buy and try to sell, you know at an affordable rate for customers as well. You know people, are starting to understand the value that's on the plate when we give it to them. The prime, the aging that we do, there's a lot of money behind that and time that are put behind that as well. But going to another restaurant you might be getting of lesser content sector, we're giving you a nice piece of quality meat on the plate. And specializing in those things, we have a better opportunity to manage it better.

Z: And so looking at it from the customer perspective, do you ever get customers that come in excited for new dishes, or maybe you change 1 or 2 dishes so they come in asking oh what happened do this dish? So what aspect do you get from it?

SM: We still get requests for dishes that we had on our menu 38 years ago. We have had people that come asking us and what we tell people is, we will make anything, as long as we have the ingredients and we have the knowledge. You know we're fortunate that we have a lot of longevity in the kitchen in here so dishes that we were making 15, 20 years ago, somebody still remembers what that dish was and how we made it. So that happens all the time.

Chef: And that's the constant battle, is finding the line of creating new with retaining your older customers that have been with you forever that are wanting the same thing. We look at menus all the time with analysis of what is the better selling item, why are there weaker selling items, it

doesn't mean that they're bad, it just means that we have to judge from there, do we change it or do we keep it. So we're always thinking of new ways to improve the menu.

SM: Changes on our menus tend to be here and at the Chophouse driven more by seasonality. So especially here, we get fish every day that are in and out of season. So in the summer time, when Blue fish, blue fish migrates south, right now it's down in NC, so the catch up around is not nearly what it is, so catching something in NC is going to be transported up here and that adds more money to it. Compared to what's swimming off the Cape, in our waters, is a lot cheaper. In June, generally that's when blue fish comes in so we'll plan a menu change around June knowing that we can add that on seasonally. Other things that come and go, halibut, that are fish that migrate one way or another, north and south, to deeper water or shallow water, based on body temperature. That makes their availability good or bad based on how that happens. And we change this menu according to those things. The steakhouse will change menus a lot according to price fluctuations because right now like heading into the holiday season, meat prices are ramping up. So they would take a look at that because demand is up, but the winter has moved in so availability gets a little less, transportation costs more money. So we may make changes to some other things to help offset availability of that product. VIA for the most part changes menu based on culinary inspiration. It's not just one driving thing that changes, the menu over there, it can be cost of ingredient, it's not the main motivation over there. The main motivation is wanting to do something and to create a new item. Italian cuisine is so broad, there are so many different things you can do that it is never ending, there's always something interesting to try.

Chef: And all the components on the dish, you don't want to run your butternut squash that runs through, we'll say, February, you don't want to have that in the middle of summer. You want to have the fruits and vegetables that are available at their peak freshness. SO that's when you buy local. And we deal with Ed, this one guy that deals with, we get a lot of fresh produce from him. Its what's available in the market, he will say "oh have blackberries that are great right now, if you guys want some" And we'll say yes, but when they're not at their peak, when they cost more money, they're not as good. So actually you pay more money for lesser quality. We try to make our best efforts in that regard.

A: You guys mentioned that you purchase locally, does it matter where you purchase from and how often do you purchase?

Chef: Well we purchase theoretically seven days a week.

SM: Yeah we purchase every day.

Chef: There is not a day that goes buy, whether it be, you know our farmer orders are three days a week and then we buy it from broad liner, cisco's or other companies like that the other days. But literally there's an order being done every single day of the week. It really is the only way to manage freshness, keep the costs down, managing your coolers. You know if you overstock things, they go bad. You tend to use more, you waste more, so you try to keep things as tight as possible.

T: So thats from small farmers to big sale retailers?

SM: Yeah, the problem with the local farmers and it's getting better, because that industry is changing, its getting better. First of all customers appreciate systems, so for example let's take the salad that we serve, there is an expectation of what that salad is going to be so we have a mix, a recipe to build the salad that we offer for the dinner. Same thing at the Chophouse and VIA. So a local farmer will come and say "okay, I've got these beautiful lettuces that are available" and you say alright, I need 20 cases of this spec of lettuce to come in and we're gonna do that, I need that multiple times a week. He'll come and say "well you know what I only have six cases today, I'll only have ten cases tomorrow, I'm not sure if I'm going to have any at the end of the week." Because they are small and they aren't going up to a thousand acre farm, like in California, and picking because you know they have a hundred acres of one kind of lettuce planted and they're rotating that. They're going out to their twenty acre plot and they've only got enough ready in one section plus they've got all the orders that they can't offer. So what we found was, suddenly you've got, it's all inconsistent, of what the salad looks different every single time that you come in. It may be great but it's different and the customer goes, to the question earlier, if the customer comes in asks for what they had years ago, well the customers expectation is that they want what they are used to getting, and they want it to be good. So if that salad was not as fresh that time, they'd complain about it and they'd want to know why. But if it's different every time, unless that's how you're promoting it that it's going to be different, that's not what they're interested in. So you have to work with the small local farms in a little different way. So if you're adding a meal on that you're going to be using three cases a week and he can come to you three times a week and bring a case each time, that's very doable and now you're getting something very local, very fresh, that is going to be great on the plate. But when you start to need larger volume things, it's very hard for the local guys to do that. It's gotten better because there are now aggregators in the marketplace, it's kind of the spoken hub, so the aggregator is now a person who has set up a business that says I'm gonna go around to all the farms and find what you have coming in, I'm going to have you all deliver it to me, then I'm gonna go out to the restaurants and I'm gonna see how much of this do you need, how much of this do you need, and then they'll see what they know is coming in. Then go back and say I can cover your order, your order, and your order, I can't cover your order because there is something else you want. And they do it rather than the farmers, they used to do all of the communication and do all of the delivery. And now one person has come in and communicate so the farmers can farm. Now what's happened is that, now they go around to the marks of the world and say "listen what do you think you're going to need over the next few months, you know during the summer when the growing season is. What do you think you're gonna use a lot of that you're gonna need because I'm gonna go out to the farmers and say can you double the amount of this because everybody seems to like this lettuce or everybody is eating kale now so I need 50 cases of kale a week. You can give me ten, you can give me ten, can you give me twenty, and you give me ten so that I can fill all those orders." And they go okay, and then that helps them with their planning and their organization. And now they don't have to worry about selling it, they just worry about growing it. And the aggregator now is the one doing the communication between the restaurants and the farmers.

Z: Is an example of an aggregator, Lettuce Be Local?

Chef: That's exactly right.

SM: Lettuce Be Local is exactly the person I am talking about. And it's a good concept.

Chef: Like he said, we're such a big, not just here but between all three, we buy so much products that we fill things to the ceilings some times to get through a weekend. So we literally just wipe people out. So we really have to pick and choose our battles now or what we can buy. You know it might be, bing cherries because we might be using them such a small amount here and there. We really try to pick what we can from them or what they can continuously supply us with. But it is getting better, they're doing a better job, they're really trying to find out our needs so the farmers can literally put those seeds in the ground for us.

SM: What the local farmers are doing a great job with is fresh herbs, that kind of thing. Herbs and spices. You dont use cases and case of herbs, but they can grow acres of herbs so that it is very fresh, very timely, and I think that's probably where they've had most success. You know things like parsley, tarragon, basil, that kind of stuff. That you can get, that is a lot better getting it you know ten miles away than 3,000 miles away in California or in Florida. That kind of thing has been really successful. Larger volume things, lettuces and so forth, you know root vegetables do pretty well, locally you know apples, fruits that are local work pretty well when they're in season. And it's pretty easy for them to make that work, it tends to be some of the larger farm things, lettuces and corn, even corn locally you can get. So it's better than it has been because everybody is, the farmer has a guarantee of use because more people are looking for and they can charge more than they used to be able to charge because of where the market place is. I think that as long as they're successful then they can keep doing it.

A: With your menu changing seasonally, is it there ever a time when you've offered snails on the menu?

SM: Oh we had snails on this menu for years and years and years. I don't know how long ago we took them off but we do.

A:And is that only at the Sole?

SM: Yes.

Z: Have you ever thought about snails at VIA?

SM: I don't think so

Chef: It hasn't popped up yet.

SM & Chef: Why snails? What's the interest in snails?

Z: We're currently doing a project for a rooftop farm that is thinking about marketing snails, farming snails in Boston. And so our project is just figuring out the markets, not selling you guys the snails, we're just trying to understand the market. See if it's there.

SM: 25 to 30 years ago, snails was a reasonably common item. And customers, it was not a foreign concept, but to put snails on the menu now, I don't know how it would go. When was the last menu you saw that had snails on it, you have no familiarity with them. I think that there is an "ew" factor, when they think about what it is. Again, 25 to 30 years ago, there was a reason it came off the menu, any reason anything comes off the menu is because there is a lack of interest on the part of the customer. So as time went forward and we used to do it in a very french traditional preparation, which is in the shell with the snail in, the compound butter, and you stuff it and you roast it in the oven, so the butter melts and when it heats up, it cooks the snail and you take the snail out and eat. It was very traditional and it just lost interest, it just was not a popular item. So then you have the economic debate, is it worth keeping the item on the menu vs if I can put something on the menu in place of it that I can sell more which people might come back for. Its that people weren't coming in for the snails, there weren't very many people offering it. It kinda lost its place, where we still have items on the menu from 35+ years ago that are still on this menu and are still our most popular items today. Snails wasn't one of them. Now would I put them back on the menu, absolutely do it again. Who knows, these things all have renaissance. What goes around comes around. All of a sudden you're doing a project on this and suddenly there's a new renaissance because young chefs are saying "oh this is something new and it's affordable and I can do it." Suddenly magazines, food editors are writing about snails and the comeback of snails and the next thing you know you got people walking in going "do you ever sell snails? Would you ever consider putting snails on the menu?" And you do.

Chef: It's funny to see, I think the food culture is getting better and better, especially around here. I know Boston you can get away with a little more than what you can around the Worcester area, but I feel its getting better. Chefs that are saying "Oh yeah I do this." and then you educate. If you get a few people that, word-of-mouth is the best advertisement, talk about it and spread it around, I think we're doing a better job locally, educating people, with tv, magazines, everybody knows everything these days. I feel that it's getting better and better and you can push the envelope a little more and a little more. You don't wanna put your foot on it the full way, you can slowly start to integrate things like snails back on to the menu without the "ew" factor as much.

A:SO I like what you guys said about the aggregator going around and seeing what do restaurants really need and what the farms give. I think that's kind what we're working with John Stoddard, who is our sponsor, so doing this research, we're trying to figure out, he sells all these vegetables, but what else can he sell, what do restaurants need, what kind of ingredients are they looking for. SO i think that he's just trying to figure out where does he fit in the restaurant business.

T: Other than that do you guys have recommendations for other restaurants that might source locally from farms?

Chef: A lot, deadhorse hill, rock 50 down on water street I believe, and deadhorse down on main street. They're two examples of people, I know deadhorse use a Boston chef came this way because of that type of movement.

SM: I know the guys at deadhorse hill they've been attending these restaurant meetings and he's the one that literally said to me, the reason we came to Worcester is it was affordable and this is where we were sourcing our product all the time so now I'm 20 minutes away from anything I need. And they're small enough, the smaller places have the ability to change menus, whether it's daily or weekly, they can based on what's available, that really does work well in a smaller operation. We change menus constantly, we prep menus every day of some way shape or form. We printed menus since the mid 80s, desktop publishing first started to print menus. We used to print the lunch menu here every day and we would change it every day, it just gets harder and harder to do that kind of thing. You know again we look at that local thing, you know when people say the farm to table movement and I said in my opinion this restaurant has been the biggest farm to table restaurant in the area because we deal with fish. We bring fish in every single day and the whole deal with fish is, the minute comes out of the water, the spoilage starts, so fighting against time and bacteria at that point where you take a meat protein, by the time you harvest that you need to wait 4 weeks before its actually at the peak of eatability because the enzymes work differently in a meat protein than it does in a fish protein. SO the whole goal is to get product from the fishing boat from the time it's harvested from the ocean on to the table as fast as you can. That's the whole goal of the whole thing. SO you work with processors, who specialize being able to do that. We work the Foley family who is the oldest fish prover in Boston and they work, they know every boat that is out. SO a boat comes in and it's got 10,000 pounds of fish on it. That boat has been out for 10 days, so this fish on that boat that's 10 days old and there's fish on that boat that was caught yesterday and then they land. Every pound of fish on that boat is sold. So somebody is getting the best fish and somebody is getting the 10-day old fish. That does not mean that there is anything wrong with the 10-day old fish, but it is not as good as the fish that was caught yesterday. The Foley family has connections, we've done business with them, I'm on my 3rd generation doing business with the Foley family. I've done business with that family for 45 years, 38 here and where I worked prior to that. That's how I was introduced to them and we buy to this day, they're our fish supplier. But we bring product in every single day, so the idea is that at the end of the night, my cooler has nothing left in it. And the next morning we have new fish coming in. Even though we go through extreme lengths to preserve the fish, the fish has to kept at 32 degree, ice is 32 degrees. Refrigerators run at at least 40 degrees, so if I took you downstairs you're gonna see all of our product buried under ice to keep it. Now that product came in, the product probably coming in the door right now that was ordered this morning. And then every single day, morning and afternoon, we have product coming in, so that it's never really around more than 36 hours. SO then we ship the product every day to the other two restaurants sometimes multiple times a day. So at the end of the night, they do an inventory, they have one or two pieces of fish left over. A chef stops by in the morning and picks up fish for the lunch service and then at 3 o'clock in the afternoon they pick it up again. SO that's the sense of farm to table, its just people thing of vegetables and fruit as farm to table. Quite honestly the most farm to table item that you can get is fish.

Team: Okay, thank you for all the answers.

SM: Don't be afraid to email me with any more questions you may have.

7.2.2 Key Takeaways

1. Armsby Abbey

Customer Details: Demographics and Frequency

- Wide range because each restaurant component draws a different crowd
- Range from kids to 90 year olds from the historical commission in Worcester
- Constant flow of customers
- Frequent customers all the time

Advertising

- pretty minimal
- Social media is their main tool

Collaboration/Farm Network

- We know other owners. We've, since the beginning, have tried to help other people be better and locally source. One of the things we obviously focus on is leading by example, growing networks for farmers. We're not a part of any restaurant association but maybe Chefs collaborative's.
- big majority of the local foods we get is sourced by Lettuce Be Local

<u>Uniqueness</u>

- For chef it's the products that inspire the dishes
- so much momentum

Interest in Snails

• Yes to snails - VERY excited about it

2. Asta

Customer Details: Demographics and Frequency

- Usually hosts 30-60 year olds
- More towards business / retired people
- Also targets neighborhoods and colleges close by
- They think they have repeating and frequent customers
- Sophisticated structure, casual atmosphere

Menu/Dishes

- Get the same customers about twice a month due to shifting menus every two weeks
- Serve platters of 3, 5, and 8 course meals. Not selling single foods

- Love to test their foods by putting under different environments (Freezing, heating, dehydrating)
- Really like the changing dishes concept and take pride in it

Advertising

- Instagram account, want to make subscriber email list but don't know how to do it
- Asta is really word of mouth not really anything else

Associations/Collaboration

• Currently not a part of a restaurant association

Local Foods

- They use "Farm Fresh" for local organic ingredients as well as other food markets in the area including Maine, Connecticut and Rhode Island.
- Get product from other areas in the country during the winter
- Have been purchasing from one farm for 8 years

Interest in Snails

- Serve snails
- Get them packaged from France
- Thinks that Mass. or somewhere in the area needs a snail farm and want one close by

3. Bancroft

Customer Details: Demographics and Frequency

- Demographic is mostly made for corporate people because of the area that Bancroft is located in
- Tuesday, Wednesday and Thursday are for corporate people. Friday and Saturday they become a steak house.
- 90% business driven. For CEO's, CFO's
- Small schools around the area. More than 30 minutes away. Don't really aim towards them.
- Lots of frequent customers. See people 2 or 3 times a week. Order the exact same thing

Advertising

• No advertising. Social media and word of mouth.

• They use connections with Boston magazines and newspapers to get their things out

Associations/Collaboration

- Apart of the Mass. Restaurant Assoc.
- Strong group and well rounded, well respected group. Over 600 restaurants in the group ranging from large restaurants to small sub shops.
- Quarterly meetings to discuss business, not food strategy
- Considers steak houses a safe place. Can't go wrong at steak houses because you know what you're getting.

Menu/Dishes

- Chefs change the menus every two months
- Dinner changes every 2 months, deserts are every month

Local Foods

- Don't purchase from small farms during the winter because New England.
- Buy from the summer. They have a sister farm that they get their meats and greens from.
- Have the farmers come in and chefs pick what they want from a menu of products
- Purchase from wholesale retailers to keep up with demand

Interest in Snails

- Not snails in the Bancroft
- Knows Higher Ground

4. Boynton

<u>Customer Details: Demographics and Frequency</u>

• Boynton covers all spectrums of demographics: old, young, family, college, corporate folks, everything in between

Advertising

- Only use social media (Facebook, Instagram, Twitter)
- No print-outs
- Constantly growing customer area

Associations/Collaboration

• Independent restaurant that collaborates / wants to collaborate with other restaurants around Worcester

- Wants to make other chefs in Worcester popular and well known
- Follows other chefs / restaurants on social media
- Chefs come from the system. They start as some small position in the kitchen, then gradually move up to chef

Local Foods

- Doesn't find food from other small farms in the area
- Wants to use small farms, but farms cannot produce enough for Boyton services
- Cannot reach demand
- Boyton is unique is because it's been here for so long; 50 years

Menu/Dishes

- Make some foods in house (all deli meats except pepperoni)
- Specials every two weeks
- Research new things from social media
- Rarely change the menu

Snails/HGF

- Snails were kind of popular back in the day but not anymore
- People aren't asking for snails
- Maybe follows John at HGF on social media
- Wants to make their own rooftop farm

5. deadhorse hill

Customer Details: Demographics and Frequency

- mid to late 20's
- younger, hipper set of people
- single, or double income no kids situations
- older, typically the empty nesters
- anybody who is deeply adamant about food
- frequent customer base
- have conversations on a personal level (work, interests, etc.)

Advertising

- active social media presence
- public relation strategies
- participating in competitions
- pitching stories to publications that may want to write about food
- service, that goes a long way

• friends tell their friends, word of mouth

Purchase of locally grown products

- 60 suppliers
- make an effort to find the best ingredients
- not characterized as "farm to table"
- "We do endorse people that are very responsible about the way they procure things or cultivate things, they need to be able to know the first thing about the earth and then the people that work for them and then also the people that they're supplying to. So, it's a very special process but it's not to be labeled as "farm to table" as far as I'm concerned."

It matters who they purchase from

• "It absolutely matters who you purchase from. We are a small business, we support other small businesses. We work with local farms, these are real people. We don't have like the big Cisco truck show up and then some hourly workers that just can't wait to get off the clock and start over time. We don't have that, we have like a pickup truck show up with people that we know on a first name basis come in, and there in like dirt-covered galoshes, and they have dirt on their fingers, they just picked these vegetables and they drove to us. And we're like "Oh thanks" and we go downstairs, and we weigh everything out but they don't even know what they have. So we go downstairs and we're just sifting through vegetables covered in dirt. One of the people we do support tremendously is a local group called Lettuce Be Local, are you familiar with them?"

Lettuce Be Local

- Lee and Lynn Stromborg
- they certify is that everything is legitimate and no one is trying to like pass of these radishes that are like in fact a commodity that's something that has been organically, or locally, or that is an heirloom product or something like that.
- any time we get something from them we know it's a breath of fresh air. It's absurd that people even have to go through those stressors, just to get their hands on food. But I think it's terrific, we love them.

Unique foods

- change menu daily so dishes come on and dishes come off
- cuisine is influenced by what's fresh now, where the staff in the kitchen have worked before, the things that they've done.

- strong meat program, we have like our beef, or our steak on the menu that we source from a farm in Vermont that's a good cut or good grade beef, we have a prime rib eye on there that's sourced locally
- careful with the preparation, the execution, and the overall the creative outlet, the innovation of that dish and what it's going to be
- A lot of people won't do that, something had to die to become the focal point of the dish. And it's very easy, you're cooking proteins, it's great they're delicious, chicken, beef, pork, shrimp, butter it's great, you're gonna come up with something tasty every time. We push ourselves to do a little bit more than just that, it's really to showcase the beauty of certain ingredients and you don't see that a lot.
- chefs are experienced in making diverse foods
- menu changes every day so no one is ever like you should change your menu more often. We've been open 7 months now, we've changed our menu so many times with so many dishes. We've done that more than most restaurants do, over a 10-year period. Sometimes 5 or 6 new dishes are going on the menu.
- Snails

<u>Interest in snails</u>

- 23:51 So demographically speaking, the local food movement is accelerating. So not the worst time in the world to consider something like that. So the flip side to that is that it comes down to the quality of the ingredients, so if you can produce something that you know is gonna be really high quality, then you can build a market for it.
- 25:53 I mean the thing that always fascinates me is that we will get that 10 cases of lettuce in, and we will make it 10 cases worth of salad or whatever the dish is, and when we're out, we're out. We're always talking during pre-meal and you know when we're ready for different services, and how many different portions of different menu items do we have. Because we run out all the time.

6. Figs & Pigs

<u>Customer Details: Demographics and Frequency</u>

- Millennials to older work force
- Regulars
- Owner knows every customer and has personal interactions constantly

Advertising

• Mailing to create more business around catering

• Word of mouth

Collaboration/Farm Network

- Mass Restaurant Association
- Goal is to change the image of Worcester so it's important to work together
- Lettuce Be Local

Uniqueness

- Variety
- Changes by season
- Everything made from scratch

Snails

• No to snails - demographic might not want them

7. Garden Fresh

Customer Details: Demographics and Frequency

- The demographic is the staff, doctors, and nurses of the hospital
- Right around 200 people come by per day
- Have personal relationships with the customers

Advertising

- No social media
- Aim to be in high foot traffic areas so no need to advertise

Collaboration/Farm Network

- They are a part of 4 different restaurants
- Try to source locally as much as possible

<u>Uniqueness</u>

- Since Garden Fresh is a small business and knows its continuous customers, they can change and adapt for its customers.
 - Can get their new shipments almost the next day

Interest in Snails

- Not really, must meet many requirements set by the hospital and this would be a risk
- The food they sell is also fast ordering food and escargot would not necessarily fit this theme

8. Niche Hospitality Group

Customer Details: Demographics and Frequency

- 8 restaurants in our group.
- family friendly and up to scale to all ages of
- some are everyday and accessible, some are more special occasion, weekend oriented
- a lot of families there and doctors' offices
- Mezcal is more price point approachable
- coming to our restaurants for years so I do have interaction with them
- wine dinner events, like we do a test kitchen event here, where we actually cook in front of 30 people and it's like a wine dinner.

Advertising

- Facebook page, twitter, Instagram accounts, and posts
- travel around some of the local hotels and businesses and talks to the people that are maybe booking functions
- extremely high end website design to our menus
- radio advertising and billboards in certain locations, we do print advertising.
- "The budget for advertising is huge, if you wanna keep growing, you need to advertise."
- Email blasts
- wine dinners and beer dinners coming out,
- "We do email blasts, with New Year's coming we get all the menus that we are going to run for New Years and we will do big email blast, there's thousands of people on our email list."

Associations/Collaboration

- "We are the Niche Hospitality Group, that's the formal name of our company. We've got 4 restaurants in Worcester, Mezcal, Bocado, People's Kitchen which is on the back side of the DCU and we have the Fix Burger Bar. We have another Bocado in Wellesley, MA and in Providence, RI. And another Mezcal in Leominster, MA and then we have Rye & Thyme like an American tavern with oysters, a wood grill and things in that in Leominster, MA. So 2 in Leominster."
- "manager meetings: all of our management comes, we do a printout of our sales reports and we look at food costs, liquor, beer, wine costs, labor costs, all of our budgets, so we have budgets for labor, budgets for food costs"

- "if you make 10 cents on the dollar, when it's all said and done you are a very successful restaurant. As opposed to who knows, a retail or service oriented places, where margins can be 40% or so, we're 10 cents or less on the dollar, it drops to the bottom."
- big craft's cocktail program, wine program, the beer
- the key in the business is the communication

Unique food

- concept driven, Mezcal: Mexican/Southwestern
- Bocado is a Spanish tapas wine bar, with Spanish and Portuguese wines
- People's Kitchen is not such a niche on the theme and concept
- burger bar is just a burger bar that sells good burgers
- commitment to hospitality
- full service driven, a commitment to excellence and hospitality
- "your food is gotta be good, your atmosphere is gotta be good, you know you gotta stay current, that's a big key right now."
- stay current with the food, with the cocktails, like here we just changed the menu
- repeat customer business

Local Foods

- in the summer we use local farms for that stuff, we use apple field farm, we use breezy gardens farm
- grass fed burger, is a locally sourced New England family farms burger,
- pricing is tough to work with too for certain things
- "When we do like monthly specials, and our wine dinners, we try to source locally as much as we can. The funny thing is at Bocado we do a fried goat cheese, it's like our most popular item, it's just breadcrumbs and you know we fry it quick. It's a great product, but I remember talking to the woman at Westfield Farms, I think it was goat cheese, I believe it was a couple years back, love your product, we know we do a fried goat cheese, I'd love to do it, she says how much do you use, I said 20-30 pounds per week maybe, that might wipe me out in 2 weeks"
- volume perspective
- big on the local when it's season
- ongoing process, it's the movement now
- it's a new thing, it's good for the environment, it's good for the local people
- we want to support our local stores, help the local community

Menu/Dishes

- People's Kitchen, has a main menu for their upper dining room, it's got like 5 appetizers, 5 entrees, and a couple of signature steaks. Those change every month, it's on a rotating basis, what's current, what's seasonal, what's local. So that restaurant really lends itself to "I'm gonna put this on the menu, I'm gonna run it for a month, I know it's in season, I can get it locally no problem."
- Here we do weekly specials but the main menu we'll change probably 3 times a year, not as vastly as it did. But we'll change items, how many of these do we sell, what's resonating, we talk in the meetings, what're the guest perceptions on certain food, so we'll change it to stay fresh and current.
- Same with Bocado, we do monthly specials that we change, like 6 tapas and a couple of other items, and then every couple months we'll say let's change a couple of them. One of the things I mentioned too was your core of repeat customers, they come back cause they like certain items too. So if you just change on a whim all the time, cause you wanna change it up

Snails

- "Ummm, I think we've run escargot maybe as a special or something before but I don't think it's ever been a menu item."
- "Yeah we can serve them and try them, you know like at the People's Kitchen, that would be a venue for us to try them at. We could run a special, and other places we run a special for 2 nights, Friday and Saturday night we buy a small portion then we can try to go in and sell them. That's something we would try for sure."
- "Yeah, even at Bocado, something like that where we could just run it as a special, a small tapas. The nice thing about tapas too, if you run it as an appetizer, they're not gonna spend \$25 on something they've never had, but you'll spend \$7-\$11 to try something between two of you, you know. "What's your meal? You gonna get snails?" "No, I never had them I'm not taking the chance, I'm gonna get the steak or a piece of fish." "Wanna try an app? I've wanted so long to try it." "OK lets try it." And then people find out "Wow I love them!" You know, so it's nice with a small plate, it lends itself to people being a little more you know risk-taking and adventurous."

9. The Hourly

<u>Customer Details: Demographics and Frequency</u>

- New business; doesn't have a solidified demographic yet
- They use Open Table (a reservation app that helps understand your demographic) and Yelp

Advertising

- Use their customers a lot
 - Feedback
 - As marketing
- Do not buy print ad

Collaboration/Farm Network

• They use their associations (Massachusetts Restaurant Association, Cambridge Harvard Square Association, etc.) a lot for resources and suggestions

<u>Uniqueness</u>

- Unique quality:
 - Locally sources seafood
 - 8 different kinds of oysters (from Maine to Cape Cod)
 - Lobsters
- Menu changes every 6 weeks so far
 - Change 2 dishes at a time
- Deliveries are made between every 2-3 days to once a week.
 - Do not order in bulk because they want the freshest food available; want fast turnover

Interest in Snails

- Had made escargot before in other French restaurant but not in this one.
 - Would try it at The Hourly

10. Sole Proprietor/VIA/111 Chophouse

<u>Customer Details: Demographics and Frequency</u>

- Wide range because each restaurant draws a different crowd
- Personalized of the customer
- "All three restaurants have a spread between 25 and probably 65, but this clearly has an older segment. Chophouse has seemingly the middle segment and VIA tends to have the younger segment."
- "We also even keep track of that as well. We know, somebody's favorites, dislikes, experiences. We gather all of that information, so we have it at all times. So you can have, you know we have a pool from the bank sometimes, instead of remembering."

Advertising

- Social media is their main tool
- "the majority of our marketing dollars we put in the billboards on the highway."
- Engaging the younger generation

Collaboration/Farm Network

- Mass Restaurant Association
- big majority of the local foods we get is sourced by Lettuce Be Local
- Collaboration amongst the different chefs of all three restaurants
- "We meet once a month, all the chefs amongst each restaurant all come out. From upcoming events to wine dinners, beer dinners. All three restaurants run promotions from time to time."

Local Foods

- "We work the Foley family who is the oldest fish prover in Boston and they work, they know every boat that is out. SO a boat comes in and it's got 10,000 pounds of fish on it. That boat has been out for 10 days, so this fish on that boat that's 10 days old and there's fish on that boat that was caught yesterday and then they land. Every pound of fish on that boat is sold. So somebody is getting the best fish and somebody is getting the 10-day old fish. That does not mean that there is anything wrong with the 10-day old fish, but it is not as good as the fish that was caught yesterday. The Foley family has connections, we've done business with them, I'm on my 3rd generation doing business with the Foley family. I've done business with that family for 45 years, 38 here and where I worked prior to that."
- "And all the components on the dish, you don't want to run your butternut squash that runs through, we'll say, February, you don't want to have that in the middle of summer. You want to have the fruits and vegetables that are available at their peak freshness. SO that's when you buy local.

<u>Uniqueness</u>

- Quality is key
- Maintaining freshness of food
- Culinary inspiration based on product
- "I think the protein is what makes it unique. This is a seafood restaurant, you know there are other, I mean every restaurant has seafood on their menu, but you know 98.something percent of our sales comes from seafood."

Snails

• Yes to Snails - seasonal time

• "25 to 30 years ago, snails was a reasonably common item. And customers, it was not a foreign concept, but to put snails on the menu now, I don't know how it would go. When was the last menu you saw that had snails on it, you have no familiarity with them. I think that there is an "ew" factor, when they think about what it is."

7.2.3 Restaurant Spreadsheet

otoctaco Icainino						
Original comacts	URL Send to ppl:	http://doodle.com/poll/9wctqsmm2/edkghb	eakgnb			
	URL FOR US!!	http://doodle.com/poll/9wctqsmm27edkghbf964twpb/admin				
Name	Description	Status	Location	Contact Name	Form of Contact	Other Notes
Bocado	Tapas represent a style of eating and a way (Interview Complete	y (Interview Complete	82 Winter St, Worcester, MA 01604	Ed Plante & Steve Champagı	Ed Plante & Steve Champagne Email: eplante@nichehospitality.com	Followed up
Armsby Abbey	Craft beers accompany comfort food & regior Interview Complete	ior Interview Complete	144 Main St, Worcester, MA 01608	Alex and Dameon		
Deadhorse Hill	A former hilltop hotel houses a rustic-chic Ne Interview set up - Alyssa	Ne Interview set up - Alyssa	281 Main St, Worcester, MA 01608	Jared<-chef Julia Auger	Email: julia@deadhorsehill.com	Suggestion Contact from Armsby Abbey
Sole Proprietor	The menu is equally varied, with plenty of sea Interview Complete	se Interview Complete	118 Highland St, Worcester, MA 01609	Rob Ahlquist	robb@thesole.com	email him and tell him elmes gave us the
VIA	Sophisticated Italian comfort fare in chic, rom Interview Complete	om Interview Complete	89 Shrewsbury St, Worcester, MA 01604			
111 Chophouse	Celebrated steakhouse classics & super-size Interview Complete	ze Interview Complete	111 Shrewsbury St, Worcester, MA 01604			
Thai Time	Warm, easygoing BYOB establishment cooki Calling at Tuesday Call - Zulean	oki Calling at Tuesday Call - Zulean	107 Highland St, Worcester, MA 01609		Call: (508)-756-7267	Called twice (manger wasn't in; no email)
Garden Fresh	The Courthouse Café is known largely for its Interview Complete	ts Interview Complete	204 Main St, Worcester, MA 01604		Call: (508)-769-6538	Dean: Owner
People's Kitchen of the Citizer	People's Kitchen of the Citizen As our physical space expanded, allowing for Interview Complete	for Interview Complete	1 Exchange PI, Worcester, MA 01608			
7 Nana	Standard sushi house preparing Asian fare,	Void	60 Shrewsbury St, Worcester, MA 01604			
Flying Rhino	Flying Rhino Cafe and WateringHole is a unit	nic Void	278 Shrewsbury St, Worcester, MA 01604			
Nu Cafe	We source from producers and farmers that v	ft Void	335 Chandler St, Worcester, MA 01602	Brie Swift	Call: (774)402-0273	
Figs and Pigs	The cuisine can best be defined as American Interview Complete	an Interview Complete	50 Foster St, Worcester, MA 01608	Candy Murphy	Call: (508)-929-0701 Email: candy@figsandpigskitchen.com	Øfigsandpigskitchen.com
Cafe Manzi	Cafe Manzi's specializes in Italian, Middleast	st Void	352 Shrewsbury St, Worcester, MA 01604			
Apple Spice Cafe	The bakery-cafe segment of the restaurant in	in Void	White City Shopping Center, 111 Park Ave, Worcester, MA 01609	909	(508) 792-0051	
The Boynton	Long-running haunt draws college kids & loca Interview Complete	oc Interview Complete	119 Highland St, Worcester, MA 01609		(508) 756-8458	
Sahara Restaurant	Middle Eastern cooking is extremely nutrition	ou Void	143 Highland St, Worcester, MA 01609			
Area Four	Area Four is fueled by creativity, fearlessness Pending call - Hannah	ess Pending call - Hannah	500 Technology Square, Cambridge, MA 02139			
Cornish Pasty Co.	A British-inspired restaurant called Cornish P Contacted - Hannah	P Contacted - Hannah	51 Massachusetts Ave, Boston, MA 02115			
Moona	Eastern Mediterranean & Arabic bites in an ir Contacted - Alyssa	ir Contacted - Alyssa	243 Hampshire St, Cambridge, MA 02139		Email: team@moonarestaurant.com No answer by phone/email	No answer by phone/email
En Boca	Shareable Eastern Mediterranean cuisine & Try Calling- Zulean	४ a <mark>Try Calling- Zulean</mark>	8 Holyoke St, Cambridge, MA 02138			
The Hourly	Cozy but airy spot serving seafood, from raw Interview Complete	w Interview Complete	15 Dunster St, Cambridge, MA 02138	Christian	Call: (617)-765-2342 Email: christian@thehourlycambridge.com	n@thehourlycambridge.com
Fat Hen	Cozy, homey but on-trend Italian serving swa Contact	wa Contact	126 Broadway, Somerville, MA 02145	Kelly	Call: (617)-764-1612	Email: kelly@fathenboston.com
Waypoint	Creative seafood & raw-bar selections, plus ; Contacted - Alyssa	s r Contacted - Alyssa	1030 Massachusetts Ave, Cambridge, MA 02138		Email: info@waypointharvard.com	
The Smoke Shop	Chef Andy Husbands, big on the competitive Contacted- Travis	re Contacted- Travis	1 Kendall Square, Cambridge, MA 02139			
Mamaleh's Deli	All-day operation for grab-and-go treats & ea Contacted- Travis	ea Contacted- Travis	One Kendall Square, 15 Hampshire St., Cambridge, MA 02139			
Little Donkey	Chef-driven spot with cool vibe serving intern Contacted- Travis	rn Contacted- Travis	505 Massachusetts Ave, Cambridge, MA 02139			
Haley.Henry Wine Bar	Stylish, intimate wine bar with light menu of c Contacted- Travis	f c Contacted- Travis	45 Province St, Boston, MA 02108			
Bar Mezzana	Sleek Italian spot dishing up elevated favorite Contacted- Travis	ite Contacted- Travis	360 Harrison Ave, Boston, MA 02118			
Alden and Harlow	Subterranean restaurant serving creative Nev Contacted- Travis	ley Contacted- Travis	40 Brattle St, Cambridge, MA 02138			
Asta	Upscale New American fixed-price tasting-me Interview Complete	me Interview Complete	47 Massachusetts Ave, Boston, MA 02115			
The Bancroft	City-chic steakhouse in dramatic space with Interview Complete	n finterview Complete	15 3rd Ave, Burlington, MA 01803			
Other Suggested Contacts	ontacts					
Name	Description	Status	Location	Contact Name	Form of Contact	Other Notes
Sweet	Charming bakery, bistro & bar with eclectic si Contacted - Alyssa	s Contacted - Alyssa	72 Shrewsbury St, Worcester, MA 01604	Elina	Message - website	
Select Oyster	Michael Serpa's snug spot serves bivalves, N Contacted - Alyssa	N Contacted - Alyssa	50 Gloucester St, Boston, MA 02115		email	
Brewers Fork	Craft draft beers, cider, cocktails & wood-firec Contacted - Alyssa	rec Contacted - Alyssa	7 Moulton Street Charlestown, MA 02129		email	
Meze	Greek Food	Need to Contact- Zulean	156 Shrewsbury St, Worcester, MA 01604	Sam (Contact from Dean from C Call: (508)-926-81115	n G Call: (508)-926-81115	

7.3 Appendix C: Snail Containment Guidelines and Regulations

Figure #XXX USDA, Animal and Plant Health Inspection Service, Construction Standards

CONSTRUCTION STANDARD A. Locate the facility in areas with minimal human, agricultural and environmental risk. Identify the facility as dedicated and secure.

CONSTRUCTION STANDARD B. Design the floor plan to prevent escape of the contained organisms.

CONSTRUCTION STANDARD C. Construct walls, ceilings and floors that are impenetrable to the contained organisms, and will withstand repeated cleaning and decontamination.

CONSTRUCTION STANDARD D. If windows are necessary, install windows impenetrable to the contained organisms.

CONSTRUCTIONS STANDARD E. Install doors that contain the organism and contribute to the security of the facility.

CONSTRUCTION STANDARD F. Design and install HVAC system (Heating, Ventilation and Air Conditioning) that prevents escape of the contained organisms.

CONSTRUCTION STANDARD G. Design and install an electrical system that maintains containment features under normal and emergency situations, and is impenetrable to the contained organisms.

CONSTRUCTION STANDARD H. Design and install a plumbing system to contain the organisms and remove liquid wastes.

CONSTRUCTION STANDARD I. The following system is not a containment requirement, however if installed, insure that vacuum cleaning or aspiration systems prevent the escape of the contained organisms.

CONSTRUCTION STANDARD J. Install a communication system that allows communication between the interior and exterior of the facility and prevents organism escape.

Figure #XXX USDA, Animal and Plant Health Inspection Service, Equipment Standards

EQUIPMENT STANDARD A. Use benches, tables and other furniture that are easy to inspect and clean.

EQUIPMENT STANDARD B. Sterilize solid waste or decontaminate infested articles (contained organisms, soil, plant material, solid waste, and contaminated or infested articles) before removing it from the facility.

EQUIPMENT STANDARD C. Use cages and containers to confine mollusks.

Figure #XXX USDA, Animal and Plant Health Inspection Service, Equipment Standards

OPERATIONAL STANDARD A. A Containment Director is responsible for the daily operation and physical integrity of the facility.

OPERATIONAL STANDARD B. Only Authorized Personnel have routine access to the facility.

OPERATIONAL STANDARD C. Wear, sterilize, and handle personal apparel to minimize the risk of organism escape.

OPERATIONAL STANDARD D. Clean and disinfect the interior of the facility and its equipment regularly.

OPERATIONAL STANDARD E. Open and handle packages of permitted organisms to prevent organism release.

OPERATIONAL STANDARD F. Start, grow, and store cultures with as few exotic contaminants as possible. Cross contamination indicates poor laboratory practice. However, it may not indicate containment problems.

OPERATIONAL STANDARD G. Follow all PPQ regulatory requirements for organisms received, reared in, or released from the facility.

Figure #XXX Improved Snail Farming, fao.org

Leaves: cocoyam, kola, paw paw, cassava, okra, eggplant, loofa, centrosema, cabbage and lettuce

Fruits: mango, pineapple, banana, eggplant, pear, oil palm, fig, tomato, cucumber

Tubers: cassava, yam, sweet potato and plantain

Household waste: peels of fruit and tuber, like banana, plantain, pineapple, yam, and leftovers like cooked rice, or beans

Supplementary vitamins: Other food plants known to contain moderate amounts of vitamins D, E and K should be added. Examples are sunflower and copra cake (vitamin D), wheat germ, lettuce and other vegetables (vitamin E), cabbage and spinach (vitamin K).

Supplementary calcium. If the soil is not high in calcium, supplementary calcium will be needed. This can be provided by sprinkling powdered oyster or snail shells or ground limestone onto leafy vegetables.

Supplementary minerals. Other minerals can be provided by placing licking stones containing the mineral in the pen.

Figure #XXX Improved Snail Farming, fao.org

- 1. Extensive system: outdoor, free-range snail pens.
- 2. **Mixed, or semi-intensive system**: egg laying and hatching occur in a controlled environment; the young snails are then removed after 6-8 weeks to outside pens for growing or fattening or both.
- 3. **Intensive system**: closed systems, for example plastic tunnel houses, greenhouses and buildings with controlled climate. (Note: the same options of extensive, semi-intensive, or intensive apply to feed and feeding).

7.4 Appendix D: Site Visit Higher Ground Farm Site Visit















Save That Stuff Site Visit













