

UBC Social Ecological Economic Development Studies (SEEDS) Student Report

**UBC Food System Project 2008 The Beaty Garden: Changing Our Campus, One Meal at a
Time, A Proposal to UBC Food Services**

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UBC Food System Project 2008
The Beaty Garden: Changing Our Campus, One
Meal at a Time
A Proposal to UBC Food Services



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I. ABSTRACT

The University of British Columbia Food System Project (UBCFSP) is an ongoing, community-based action research (CBAR) project involving multiple partners and collaborators. The overall objective of the project is to assess and improve the sustainability of the UBC Food System. The main focus of Scenario six was the development of a business proposal for a sustainable food outlet set to open in the new Beaty Biodiversity Centre for the UBC Food Services (UBCFS).

The new food outlet was given the name “The Beaty Garden” with the slogan, “We know our food”. For the menu plan, we raised the possibility of “Zero Mile Mondays” featuring fresh produce from the UBC Farm. And, as part of our promotional campaign, we have made a poster called the “8 Reasons to eat local”. As well, we have developed a stamp-card scheme where each stamp translates to a 25 cent saving for each meal and a collection of 10 stamps translate to a free bake good. As part of the waste management initiative, we recommended the extension of the green discount for those who bring their own containers. However, further assessments may be necessary on the waste management program on campus. For serving wares, we recommended the usage of biodegradable materials made from potato, corn and sugar cane waste. To address interior design, we suggested the usage of bi-ceramic metal halide lamp. From our focus groups, the participants were attracted to the appeal of a sustainable food outlet but were less willing to pay for higher priced lunch meals. Finally, we recommended to the teaching team that this scenario be narrowed down in scope to stimulate specialization of specific tasks.

II. INTRODUCTION

The University of British Columbia Food System Project (UBCFSP) is an ongoing, collaborative, community-based action research (CBAR) project involving multiple partners and collaborators (UBCFSP, 2008). “The project emerged out of the recognition that our global, national, regional, and local food systems are increasingly characterized as socially, ecologically, and economically insecure and unsustainable” (Rojas, Richer and Wagner, 2007). The overall objective of the UBCFSP is to conduct a “campus-wide UBC food system sustainability assessment”; this entails the identification of barriers which hinder and opportunities that promote food system sustainability (Rojas, Richer and Wagner, 2007).

For the 2008 semester, the class of Agriculture Sciences 450: Land, Food and Community III were presented with eight scenarios examining different aspects and components of the

UBC food system. This paper summarizes the task assumed by Group 22: Developing a Sustainable Food Outlet for UBC Food Services in the New Beaty Biodiversity Centre.

The paper is comprised of the following: group reflections on the project's vision statement, problem definition on scenario 6, vision statement for the café, outline of the methodology, findings that are prepared as a business plan proposal, general recommendations and finally, the conclusion.

III. GROUP REFLECTION ON UBCFSP VISION STATEMENT

The Vision Statement for a sustainable UBC food system is a set of guiding principles collaboratively developed by the project partners. The vision statement outlined and synthesized the main attributes of a sustainable food system (Rojas, Richer and Wagner, 2007). It also provided a clear indication of consensus among the UBCFSP partners in terms of “where we want to go” with the UBC food system (Rojas, Richer and Wagner, 2007). The Vision Statement for a Sustainable UBC food system is outlined below.

Vision Statement for a Sustainable UBC Food System

The overarching goal of a sustainable food system is to protect and enhance the diversity and quality of the ecosystem and to improve social equity, whereby:

1. Food is locally grown, produced and processed.
2. Waste must be recycled or composted locally
3. Food is ethnically diverse, affordable, safe and nutritious
4. Providers and educators promote awareness among consumers about cultivation, processing, ingredients and nutrition
5. Food brings people together and enhances community
6. Is produced by socially, ecologically conscious producers
7. Providers and growers pay and receive fair prices

The vision statement provided a strong foundation as to what a sustainable food system should look like. As a group, we regarded the vision statement as a reference, this concept has two explanations. First, the vision statement is considered as a frame of reference, it functioned like a checking device for our recommendations and proposals. Second, the

vision statement is considered as point of reference, which provided a starting point for the various directions we wished to take with our business proposal.

One of the guiding principles that really spoke to us was the third guiding principle, that food should be affordable, safe, nutritious and ethnically diverse. We understand that while ethnically diverse and affordable food can be easily obtained through the global market, there should be a balance where affordability and ethnic diversity is realized at a local level. Attempts in doing so not only reduce food miles, it also goes on to contribute to a better community. The main message that we obtained was the idea of balance, that it does not imply the complete abandonment of the international market. This brings us to our second point, which is the realization that each guiding principle is complementary to another. For example, when food is ethnically diverse, affordable, safe and nutritious (third guiding principle) at a local level (first guiding principle), it brings people together to appreciate the ethnic diversity and enhances communities through the support of local businesses (fifth and seventh guiding Principle). Our second point goes on to show that, no one guiding principle is more important than the other, and in order for a food system to be sustainable, each guiding principle should be present to complement each other.

We do feel, however, that there is a lack of consistency and clarity in the description of the sixth and seventh guiding principles. This discounts the overall effectiveness of the vision statement because it may become difficult for people to follow. We would recommend the sixth principle to be reworded as, “Producers are socially and ecologically conscious”. And, for the seventh guiding principle, we suggest the addition of “agree to”, so that the seventh principle is reworded as, “Providers and growers agree to pay and receive fair prices”.

It is also important to note that the vision statement addressed sustainability at a social, economic and ecological level. This spoke directly to our scenario because when a business

is looking to become more sustainable, it often has to incur additional costs. While addressing economic viability, a business cannot lose sight of consumer interest towards sustainability; it has to understand how consumers will react to and connect with sustainability and its importance.

IV. PROBLEM DEFINITION

For years, the goals of business and the environment were considered to be incompatible (Walley and Whitehead, 1996). On the other hand, global population and environmental pressures have challenged various firms to develop “new business strategies founded upon the principles of sustainability—assuring that they can meet the needs of both present and future generations of customers and stakeholders” (Fiksel, 2001). Gunningham, Kagan and Thornton (2001) further emphasized the role of the corporate world in working towards sustainability through innovations at the production level. In addressing the current food system, Kloppenburg et al. (2000) stated that, “initiatives intended to create alternatives to the conventional, industrialized, global food system are now emerging”. In Vancouver, more sustainable food choices are being incorporated into restaurant menus while growing number of eco-friendly initiatives are taken on by a range of public institutions (UBCFSP, 2008). At UBC, UBC Food Services (UBCFS) have incorporated organic shade grown fair trade coffee at non-franchise campus outlets, healthier food choices along with the *THINKFOOD* product line, green discounts for bringing your own mug, composting units at all food outlets and more (UBCFSP, 2008).

In line with its commitment to sustainability, the UBC Food Services (UBCFS) is looking to establish an eco-friendly food outlet within the new Beaty Biodiversity Centre. UBCFS envisions the outlet to be as sustainable as possible. More specifically, UBCFS has requested for the following:

- A robust menu plan that will incorporate sustainable food choices (while taking UBC's food procurement practices into account)
- Market research that will provide insight into consumer interest and awareness of sustainable practices and food choices
- Suggestion of promotional and educational tools that will raise consumer awareness and interest
- A Proper waste management plan that will include biodegradable serving wares
- Recommendations on sustainable construction of the food outlet: building materials, lighting and etc...

In preparation for the requirements above, we will also be facing the following challenges:

- Space availability: the proposed food outlet will only be 300 square-feet (A. Parr, Personal Communication, March 6, 2008)
- Securing local supply: finding the balance between desired quantity and price (A. Parr, Personal Communication, March 6, 2008)
- Increased cost—associated with sustainable practices, including construction material, biodegradable serving wares (A. Parr, Personal Communication, March 6, 2008)
- Sustainability as a marketing tool—still considered a new topic, as such, difficult to promote (J. Campbell, Personal Communication, Feb 17, 2008)

UBC as a microcosm of the global food system

This scenario may be applied at a global scale because most businesses share similar challenges when attempting to adopt more sustainable practices. This is especially true in the case of consumer awareness and interest. Firms often have a difficult time in attempting to pass on the cost to consumers because consumers do not yet understand why there is a

higher cost associated with more sustainable practices. The concept of promotional and educational tools may be applied under many different circumstances to educate the public on sustainable food choices and sustainable practices.

V. CAFÉ VISION STATEMENT

We envision The Beaty Garden Café as a revolutionary food outlet on the UBC Campus that uses sustainable economical, social as well as ecological practices. We hope to provide a stimulating setting with a warm and welcoming atmosphere, and an appealing equilibrium of an urban and tastefully rustic ambience.

We envision our proposed name for the food outlet, “The Beaty Garden Café”, to be synonymous with sustainable practices and as well as the notion of connecting people with their food. Knowing exactly where one’s food comes from and what is on one’s plate is an important part of our vision. Hence, we put forth the slogan of “We know our food”.

Our vision is for The Beaty Garden to build strong working relationships with our local suppliers as well as strong relations with our community. We encourage community participation and believe it is a crucial part of our vision to have our customers involved in activities that promote sustainability awareness.

VI. METHODOLOGY

The project is based on community-based action research (CBAR), principles of this methodological approach include: “open communication, participation, inclusion, relationship-building, and capacity building” (Rojas, Richer, Wagner, 2007). There was also a strong emphasis on acquiring inputs from stakeholders during the inquiry process so that systematic approaches can be made to resolve specific problems (Stringer, 1999).

Stakeholder input played a very strong role in Scenario Six because understanding what the stakeholders want is exceptionally important for the success of a business proposal.

Inputs from project partners

Inputs from various stakeholders and project partners were collected via face-to-face interviews, telephone interviews and e-mails. The main project partner for this scenario was the UBC Food Services (UBCFS). The Director of UBCFS, Andrew Parr, provided a broad range of information, everything from cost figures to product placement. Dorothy Yip, who is the General Manager of Retail Operation (Purchasing & Project Coordination), specifically dealt with questions regarding the purchase of sustainable and biodegradable serving wares. Finally, Juliana Campbell, the Marketing Coordinator for the UBCFS, offered her feedback on potential promotion options and marketing opportunities.

During course of the term, several restaurants and food suppliers were also contacted to generate ideas on menu plans and gather supply information. Some of the restaurants include *Sprouts, Aphrodite's Café and Cob's Bread Bakeries*.

Collaboration amongst scenario groups

This year, four groups from the Agriculture Sciences 450 class were selected to work on Scenario Six, namely, Groups 8, 10, 11 and 22. Due to the numbers of contacts available, the process of input acquisition from project partners and stakeholders became a collaborative effort, where each group selected a contact of choice and agreed to share their findings with all the groups involved.

Literature Review

Scenario Six for the 2008 Spring Semester was a relatively new undertaking for the UBCFSP. As such, the attempt in finding relevant information from past scenarios (from year 2006 and 2007) was less direct. Relevant information was drawn from Scenarios two, three and four for the 2006 semester, and Scenarios three, four and five for the 2007 semester. In particular, scenario four findings from the 2006 and 2007 school years were found to be rather pertinent. Year 2006 findings provided insight into the level of awareness of the

relationship between local food and sustainability, these findings tied directly into the market research component of Scenario Six for this year. Similarly, findings from the 2007 school year offered insights into extending local BC food purchase on campus, which is directly related to UBCFS' vision for the new food outlet (UBCFSP, 2008). Other survey results from the 2007 scenarios also provided some indication of consumer interest and knowledge. Survey findings from the two previous years were considered to be recent and therefore applicable to market analysis. The utilization of quantitative results from past scenarios allowed for opportunities in conducting qualitative market research in the form of focus groups.

Focus Group

The main purpose of the focus group is to collect qualitative data on consumer responses, opinions and attitudes towards the menu plan. Two to three facilitators were responsible for focus groups ranging from four to six participants. Facilitators' tasks involved leading and guiding discussions as well as note taking on the discussion process. All focus groups took place at the Student Union Building (SUB) at UBC. Participants included those who were randomly chosen at the SUB and those who agreed to participate through e-mail response. A theoretical approach was taken during the analysis of the qualitative data. However, general trends were also noted in terms of specific consumer attitude towards pricing and menu items.

VII. MENU PLANNING, FOOD DISTRIBUTION, AND NUTRITION

Food is the centre of any food outlet and hence, sourcing for food and having a menu that reflects the 3 pillars of sustainability (environmental, economic, and social) are important processes in making The Beaty Garden a sustainable food outlet. By featuring as much local, unprocessed, and seasonal fresh foods in the menu as possible, our team believes The Beaty Garden could fulfill the mandate of sustainability with regards to food.

Environmental Sustainability

We believe having certified organic food should not be as much a priority as having local food at The Beaty Garden, as organic food is not necessarily sustainable.

With only 2.8% of British Columbia's farms being certified organic in 2005, it is likely that a lot of certified organic food in BC would have traveled great distances (Certified Organic Associations of British Columbia). The long distance traveled by the food emits the greenhouse gas emissions that contribute to global warming, especially when transported by air or truck (Bentley & Barker, 2005). In addition, as its demand grows and prices rocket, organic food becomes a suitable target by corporations for industrialization, where a multitude of ethical and environmental issues can result (Pollan, 2006).

There seems to be a lot of complexity and cost involved for a farm to be certified as organic and it is likely only the larger and probably more industrialized farms are able to get certified. Allan Christian from Aphrodite's Café and Pie Shop¹, is part of the Glen Valley Organic Farm Co Operative². In our interview with him, we learnt that the farms from which he obtained most of his food supplies are not certified organic although they practice sustainable farming methods.

Based on what Chef Steven of Place Vanier told the AGSC 450 class, we learnt that UBC Food Services buys as much whole foods as possible and few processed foods. Using whole food saves fossil fuels used to run the processing machines and to make packaging for the foods. It also cuts down the distance between the farm and plate.

Economic Sustainability

¹ Aphrodite's Café & Pie Shop is located at 4th & Dunbar, Vancouver, and is known for using local and organic ingredients

² From the website: "Glen Valley Organic Farm Co-op (GVOFC) is a community of individuals who have come together with the shared goal of sharing, owning and operating the Glen Valley Organic Farm."

Buying local food stimulates the local economy, generating jobs, and supporting local farmers (100 Mile Diet, 2008). In addition, buying local food too gives an economic reason for the land that is used for farms to be kept being used for food production.

We also believe consumers should pay slightly higher prices for the higher quality of food. Allan from Aphrodite's strongly believes that quality speaks for itself and if people know the importance of eating good food, they are willing to pay more (A. Christian, personal communication, February 11, 2008). This emphasizes the importance in raising the awareness of potential customers of the important role their food choices play in building sustainability.

Social Sustainability

Lastly, by using local and less processed food, we reduce disconnection between farm and plate. By educating people on the benefits of local and less processed food, we can help to empower them in making better food choices. Knowing that they are eating food that is good for the health of the environment and the individual can promote well-being of the individual and community as well, further enhancing social sustainability.

I: Food Distributors

Methodology

In looking for local food distributors, we carried out the following:

- a) Reviewed previous years' AGSC450 contacts for reliable food distributors
- b) Contacted 2 restaurants for their sources of local food, namely Sprouts³ and Aphrodite's Café and Pie Shop

³ Sprouts is a non-profit organization, which is 100% student and volunteer run. Its mandate is to connect people with the land and people from which their food came from (Sprouts, 2008).

Our Criteria

- a) Relatively competitive prices and willingness to negotiate discounts
- b) Established contact with our Group and is willing to deliver to UBCFS
- c) Established contacts with restaurants on campus to allow all the food to be delivered together to further reduce ecological footprint
- d) Distributes a wide range of food from British Columbia or from areas close by during the barren winter months.

It would be more cost-savvy for UBCFS to buy direct from wholesalers or farms and there would be one less link between consumers and the origins of their food. However, Andrew Parr mentioned his preference for a supplier who could provide for most of their needs. With regards to cost, Andrew said UBCFS would be willing 'to consider an organic line of food at a higher cost as long as the marketplace recognizes the need for (these items) ' (Parr, A., personal communication, 22 March 2008). Having one supplier would also reduce the number of trips to transport food to UBC, and hence, reduce the carbon dioxide emissions.

Findings *(for more distributor-specific information, please refer to appendix)*

- a) *Organica: Distributes a wide range of organic produce and food products*

Group 6 from 2007's AGSC 450 class had established a good relationship with Discovery Island Organics (DIO), a produce wholesaler. In March 2008, Andrew Parr informed us that UBCFS has just started to look into ordering organic apples from DIO and they are hopeful about getting organic BC apples by summer 2008.

In February 2008, our group contacted DIO's Randy Hooper about the possibility of supplying food to a new sustainable food outlet at UBC. Randy referred our inquiries to

Rachel Sutton of Organica, as Randy feels that Organica will be able to meet all the food needs of UBCFS's new outlet, unlike DIO.

Rachel is very enthusiastic about working with UBCFS's new sustainable food outlet because she, like UBCFSP's vision, believes in building a sustainable food system. She also feels affiliated with UBC as her brother is a UBC graduate and her father is a professor at UBC (R. Sutton, personal communication, March 19, 2008).

We recommend UBCFS to establish a good working relationship with Organica for possible negotiations of lower prices, which Rachel is open to. Organica aims to provide the 'best prices in the city' and quoted us prices as 'cost+25%', where the 25% goes to Organica.

b) *Pro-Organics: Distributes produce, staples, dairy, baking supplies*

We also contacted Aphrodite's and Sprouts food distributors which supplied local and often, organic food. From the large list of distributors, we narrowed down the list based on the criteria, to Pro-Organics for our recommendations.

John Benedetti from Pro-Organics told us that one of their mandates is to try support local organic farms and we also appreciated that they publish a separate "B.C. Grown" list during local season. They were also enthusiastic to partner with UBCFS.

c) *COBS Breads: For sandwich breads and baked goods*

We took into account Andrew's request to look into setting up a relationship with COBS Bread to see if they would supply specialty breads to UBC. Currently, according to Andrew, the only other specialty breads company liaising with UBCFS is Terra Breads, which supplies organic breads to Sage Bistro. The prices of Terra Breads are more expensive than COBS but Sage Bistro is a higher end restaurant and we believe it wouldn't be economically viable to use Terra Breads at The Beaty Garden.

Jeff Laderoute, COBS bakery manager, at West Broadway, is more than happy to supply a variety of unique healthy breads for breakfast and lunch, as well as individual bread/pastries that can be sold instead of less unhealthy cookies and tarts. During our interview with him, we found COBS to be very flexible with ordering and delivery. In addition, Mr. Laderoute told us that he will be able to give a discount to UBCFS.

We recommend UBCFS to get in touch with Mr. Laderoute from COBS to develop an agreement for supplying bread and pastries to The Beaty Garden.

d) *The UBC Farm*

The UBC Farm would be a wonderful food source for a sustainable food outlet on campus because of the few food miles. The Farm could also use the waste produced from the food outlet, creating a closed loop system. Supporting the Farm helps to build a sustainable food system at UBC and shows that the Farm has an economically viable reason (amongst others) to be part of the UBC campus.

Unfortunately, Amy Frye, the marketing coordinator of the UBC Farm, informed the AGSC450 class during her guest lecture, that the Farm has difficulty meeting current demands and supplying. According to the findings by Group 17 of AGSC 450 2007, there has been an increasing amount of production pressure on the farm during late summer-early fall, due to the Community Supported Agriculture programs and the Saturday Farmer's Market. Those two outlets together already make up 77% of the farm's total sales (A. Frye, Guest Lecture, March 19, 2008). In addition, the UBC Farm does not have much produce, other than herbs, during the winter months (Group 17, UBCFSP Paper, 2007). Since Andrew Parr has expressed the need for a reliable and consistent food supplier, our group ruled out the possibility of UBC Farm being the sole supplier to The Beaty Garden.

What we believe UBCFS could do to support the UBC Farm and to raise its importance amongst the UBC community is to have 'Zero Mile Mondays'. On Mondays, The Beaty Garden could feature as much ingredients as possible from the Farm for the daily special. We ran the idea by Amy who thought designating Mondays for featuring food from the UBC Farm would be best as the Farm delivers on Friday (between 3-7pm). The Farm would also be more able to meet the demands of the outlet if it were to supply it for only one day in the week (A. Frye, Personal Communication, March 30, 2008). Every Wednesday, Amy sends out a produce availability list (via e-mail or fax) to all of their restaurant customers letting them know what will be available for the coming Friday. She will need to receive orders back by Thursday lunchtime to confirm them.

During the barren winter months (between December to Mid-February), the farm is closed. However, Amy informed us of the possibility of having chickens on the farm during the Winter of 2009 and hence, eggs may be available for 'Zero Mile Mondays'.

Group 17 from AGSC 450 2007 had found that UBC Farm is able to supply good quantities of butternut squash from September to November. This could be one item that UBC Food Services could order for several Mondays during the fall. In addition, Amy mentioned that items with growth potential include berries and garlic, which could be bought in bulk and preserved for use over the winter (A. Frye, Guest Lecture, March 19, 2008).

II: Menu

Methodology

a) Getting Stakeholder's Input

We talked to Andrew Parr to find out what space is available for food preparation and storage in order to determine what sort of menu items would be feasible.

b) *Reviewing Similar Restaurants and Cafés*

We researched menus from other small restaurants and cafes that have similar sustainability visions as UBCFSP, such as Edible Planet⁴ and Sprouts. We also drew feedback from Allan from Aphrodite's (which had started out as a small café).

c) *Researching Recipes and seasonal foods (refer to Appendix F)*

We searched various online recipe websites and North American 'foodie' blogs, focusing on seasonal eating. From the seasonal recipes we found, we selected healthier recipes⁵ that sound appealing and unique. In the interest of time, we could not carry out food tasting focus groups (refer to Appendix B for questions and section XIII: Focus Group Findings).

Findings & Recommendations

a) *Small Menu (refer to Appendix A)*

We found out from Andrew that all food will be cooked at the main kitchens of UBC Food Services and transported to The Beaty Garden because of the lack of space available for food preparation. Hence, we felt it was necessary to keep the menus small, with no cook-to-order dishes. This would also help to ensure a high turnover rate as more customers can be served more quickly.

We designed 2 example menus – one for a week in fall/winter and another for a week in spring/summer menu to ensure that seasonal and local foods can be used. We attached two example recipes in Appendix F, and the rest of the recipes will be emailed to Karen Rideout, our Teaching Assistant, due to the lack of space in the report.

⁴ Edible Planet Café (Vancouver) is a small café which aims to provide food produced by local and organic farmers. The café tries to practice environmental responsibility, such as by composting and recycling.

⁵ Being nutrition students, we have some knowledge of deciphering which recipes were healthier than others. For example, we tried to pick out recipes that were lower in high fat ingredients like cream, and we tried to shift the menu to a more vegetarian friendly one.

b) *'Everyday' yogurt/fruit/granola cups, made-to-order sandwiches/wraps, and healthy snacks*

Reviewing Edible Foods' menu, we decided to have items which are constant day to day. For breakfast, we suggest having a yogurt, seasonal fruit, and/or granola bar, tended by The Beaty Garden staff. Some of our team members who have lived at Totem or Place Vanier had noticed the popularity of such bars and thought it would be a great idea to have them available at The Beaty Garden.

Made-to-order sandwiches and wraps seem to be popular with the UBC community, based on observing the line ups at Subway and at Totem's and Place Vanier's sandwich bars. To help these items stand out from other made-to-order places on campus, a variety of healthy COBS breads can be used.

Healthy snacks can be made available throughout the day, such as gluten free, vegan, organic baked goods and COBS breads. The Beaty Garden's staff can also pack the remaining breakfast yogurt/granola/fruit into cups and sell them later in the day.

c) *Daily Specials*

We recommend having daily specials for breakfast and lunch, featuring seasonal & local food where possible. Edible Foods and Sprouts have weekly menus that change the daily specials from week to week and we recommend The Beaty Garden to do the same in order to provide a varied menu for regular customers.

d) *Less Meat-based Menu*

We designed the menu to have less than half of the week's daily specials containing meat. Modern-day meat production is often unsustainable due to the large amounts of greenhouse gases and animal waste produced at farms and processing factories (Nierenberg, 2006). In addition, a lot more energy is wasted in meat production; more grain (and hence, more

resources) is needed to feed livestock to produce 1kCal of energy, than is needed to provide 1kCal of energy when one eats the grain directly (Pollan, 2006). By designing the menu to be subtly less meat-based, The Beatty Garden can help to reduce meat consumption on campus and thus, promote environmental sustainability. Also, other than Sprouts and Agora, there are no other vegetarian outlets or noticeably less meat-based outlets⁶. This can give The Beatty Garden a differential advantage, but at the same time, undermines the need for promotion and education. It is necessary for the community to understand how a less meat based diet is part of a sustainable food system and why they should even care about sustainability. We did not make the menu completely vegetarian; deli meats are available for sandwiches everyday. We do not believe the UBC community is ready to embrace a fully vegetarian outlet, and this assumption was verified later in our interview.

e) *Zero Mile Mondays*

We suggest having 'Zero Mile Mondays' where the Monday daily special could include at least one item from the UBC farm.

VIII. PRICING STRATEGIES

The pricing for the menu was strategically established to provide affordable prices to the general public, students, faculty, and The Beatty Biodiversity Building visitors while making The Beatty Garden profitable.

Methodology

a) *Interviews with Andrew Parr*

All the scenario 6 groups came together to derive questions for Andrew Parr of UBCFS, and 2 representatives were sent to interview him. Andrew provided a helpful guideline which our team kept in mind as we priced our items on the menu.

⁶ This was brought up by one of our focus group members when we were asking questions about the menu.

b) *Referral to Edible Planet's and Sprouts' menu prices*

c) *Conduct market research*

We conducted focus groups (Refer to Focus Group) to find out how the UBC population would feel about the menu and its prices

d) *Reviewed previous years' AGSC 450 literature*

e) *Reviewed menu prices of existing food outlets on campus such as Pendulum, Sage, 99 chairs, and The Barn.*

Findings and Rationale for Prices:

a) *Prices to be higher than other UBC food outlets but lower than Sage*

Andrew provided us with the following details:

- Fixed Cost for the outlet is said to be- 32%
- Labour cost is said to be 38%
- Minimum daily revenue (based on a 8 hr operating day) has to be \$800

Keeping in mind the fixed and variable costs, the quality of our menu, as well as Andrew Parr's suggested daily revenue, we believe the prices of the food offered at The Beauty Garden are going to be higher than most outlets on campus, except for Sage Bistro.

b) *Prices subject to be higher than Sprouts, and reflective of Edible Planet prices*

Sprouts charges customers food prices close to the cost price as they are a non-profit café.

We assumed our costs are the same as Sprouts since both The Beauty Garden and Sprouts are aiming to use as much food that is local and sustainable. This gave us a baseline and speculative estimate to work with when trying to cover our costs through our pricing.

Because our menu items and structure is inspired by Edible Planet's menu, our prices are similar to theirs.

c) *Higher Prices for Zero Mile Mondays*

Our colleagues from Group 17 of AGSC450 2007 found out that 81% of 124 people they interviewed at UBC are more willing to pay more for food containing ingredients from the UBC Farm. This created incentive for us to charge slightly more for the specials during our 'Zero Mile Monday'.

d) Range of prices: Cheaper 'Everyday' items, more expensive 'Daily Specials'

Andrew Parr also suggested keeping a balance on the menu by having high and low priced items. Having more options for prices and sizes can enable The Beauty Garden to cater to consumers on different budgets and appetites.

e) Focus Group Findings

Taking into account our focus group findings, we discovered very intriguing and useful information in terms of our suggested prices for the menu. Our most common thread in all our subjects was many would find these prices acceptable in a sit down restaurant but now a to-go type café. In particular, they mentioned that lunch is expensive (See Focus Group Findings).

IX: PROMOTIONAL AND EDUCATIONAL TOOLS

Education, promotion and marketing are essential to build public awareness of the important roles of the food system and individual food choices on sustainability, and The Beauty Garden's vision of being carbon-neutral or negative.

Methodology

A literature review of previous AGSC 450 reports was conducted and materials from class presentations, focus groups, and personal communications with key stakeholders were utilized.

Findings and Recommendations

From the results of our focus groups, we found that the community of UBC has poor sustainability awareness. For example, some of the focus group participants were unaware of the ecological benefits of eating less meat. However, when they were told about the lack of sustainability in meat production, they were more willing to support our proposed less meat-based menu plan. Most students were also unaware of the current initiatives in place (for full focus group findings, see section XIII).

We recommend educating consumers about the reasons for supporting a sustainable outlet and promote closeness between the consumer and food by the following methods:

a) The Beaty Garden – ‘We know our food’

To give meaning to our tagline, ‘We know our food’, two tactics are proposed:

- Ingredients – We recommend stating the ingredient list of each menu item on cards at display cases or on the LCD monitors. This not only empowers customers by knowing what is in their food but also makes it easier for those with allergies. We recommend The Beaty Garden display nutrition and interesting facts of seasonal local foods featured in the daily specials on the LCD monitors. This could educate consumers about the food they are eating – not just nutritionally but also about the organism from which it came from, reflecting the theme of reconnecting food to plate.
- Source – Labels or logos by the side of the ingredients can indicate the source of the foods. This can help consumers to see that local food can taste great, get in touch with seasonal foods, and hopefully, further encourage local eating. Also, the frontline staff should be knowledgeable about the sources of featured ingredients.

b) Zero Mile Monday

We believe this is a great way to promote the UBC Farm and local food. Notices about the Farm and the featured ingredients can be displayed on the LCD screen. As Amy Frye said through e-mail, there is no benefit to the community unless the students are aware the produce is from the Farm (A. Frye, personal communication, March 19, 2008).

c) Education and Promotion

Methods of building community spirit and awareness can include having community notice board where people can post relevant event information like 'Responsible Consumption Week'. Occasional community events, like fundraisers for the farm, could be held. Other examples include:

- Poster on '8 reasons to eat local' (refer to Appendix D)

We designed a poster highlighting '8 reasons to eat local food'. The poster could be framed and hung on one of the walls. The poster can hopefully increase the community's awareness of why they should eat more local food.

- 'Friends of The Beaty Garden' card (refer to Appendix D)

The 'Friends of the Beaty Garden' is an initiative to encourage the customers to bring their own containers. Every time a customer brings his own utensils, he not only can save himself \$0.25, but earn a stamp on his 'Friends of The Beaty Garden' card. Upon the 10th stamp, he can get a free baked good (or coffee). This idea is based on the 'Eco card' program by the AMS Food Services (N. Toogood, personal communication, March 19, 2008). Through this initiative, we hope to promote a sense of community and encourage regular customers. It would also improve the sustainability of the outlet by decreasing the use of disposable containers by encouraging more customers to bring their own containers.

X. WASTE MANAGEMENT

Effective waste management is hence an essential step in making The Beaty Garden a sustainable food outlet. We hope UBCFS's staff will consider the 4 components of our revamp of the oft heard mantra: reduce, reuse, recycle, and return (to the earth through composting).

Methodology

We reviewed the current waste management practices by UBCFS outlets and past research AGSC450 reports to make our recommendations for improving waste management by UBCFS at The Beaty Garden.

Findings

UBC Waste Management, which works closely with UBCFS, provides waste management services, as well as waste reduction education and promotion programs to the UBC campus community. UBCFS is part of the Organic Collection Program which diverts UBC's compostable material from the landfill, to promote a sustainable closed-loop process⁷ (UBCWM, 2008). In addition to composting waste, UBCFS also uses biodegradable products to reduce the amount of waste going into the usual waste stream and purchase food items from local producer to minimize packaging materials and energy (UBCFS, 2008). Customers who bring their own mug or container to any UBCFS outlet get 15% discount which has helped to reduce paper cup by 10% over the past 3 years (UBCFS, 2008).

These sustainability initiatives on Campus have been playing important roles in shifting UBC towards becoming a more sustainable community. However, there still exist challenges that impede the effective implementation of composting program at UBC. One

⁷ The pre and post consumer waste are collected by the UBC waste management every week and are sent to In-Vessel composter, which can produce a useful nutrient-rich end product that can be used in gardens (UBCWM, 2008).

of the biggest challenges is the lack of knowledge and participation among students in composting on campus (Group 19, UBCFSP Paper, 2007) (Group 23, UBCFS Paper, 2007).

Recommendations

Colleagues from Group 19, 21, and 23 of 2007's AGSC450 class have made a number of good recommendations for increasing participation and effectiveness in composting on campus which can be adopted, on top of UBCFS current initiatives:

- a) *Displaying eye-catching posters with clear and concise composting messages near cashier registers and waste stations*
- b) *Placing recycling and composting bins where they are easily assessable to customers*
- c) *Promote by displaying composting propaganda on trays and other places, or through the use of 'compost me' stickers*

The following recommendations are mainly designed for The Beauty Garden's management and employees to engage in sustainable waste management practices:

- a) *Gain firm and visible management support for waste reduction*

The management should set goals for waste reduction within the food outlet by educating staff on the importance and benefits of waste reduction and encouraging/rewarding employee participation/commitment in waste reduction.

- b) *Designate an enthusiastic and motivated waste-reduction coordinator*

The coordinator's main role will be to plan and coordinate waste-reduction activities, and advocate the staff's active involvement in waste reduction. The coordinator can act as a link between management and employees, reducing the load on the management.

c) *Continued involvement in UBC Waste Management's (UBCWWM) Organic Collection Program*

The designated waste-reduction coordinator should contact the Organic Collection coordinator at UBCWM to determine the cost of organic waste disposal and arrange collection frequencies, depending on the amount of the waste production (N. Gallant, personal communication, March 22, 2008). If necessary, small green collection bin can be purchased from UBC waste management at a cost of \$10 (UBCWWM, 2008).

d) *Conduct waste assessment*

The manager and waste-reduction coordinator should carefully assess the amount of waste generated at The Beaty Garden, review purchasing policies, and evaluate waste stream content. A waste assessment is recommended because it helps to identify target areas for 'reducing, reusing, recycling, and returning'. In addition, assessment of waste demonstrates to employees the types and quantity of waste generated. To determine the waste composition, a waste sort can be conducted (Restaurant Waste Reduction, 1999). For small food outlets like The Beaty Garden, it would be feasible to collect and sort one day's waste. It is important to make sure that the sample waste used truly represents the restaurant's actual waste, otherwise the calculations on waste generation, waste composition and waste reduction would not be accurate.

e) *Training of employees and continued promotion*

Successful waste management relies not only on careful planning, but also on staff participation. It is important that all employees are actively engaged in the aforementioned four aspects of our 'mantra'. The manager/waste coordinator of the food outlet should explain how waste reduction can benefit both restaurant and the environment, and describe the goals. Mandatory orientations for waste reduction could be given to acquaint employees with recycling and composting. Training should be

repeated periodically to ensure employees are able to separate compostable materials from contaminants. Various composting and recycling campaigns may be organized to make the training process more interesting. Furthermore, employees should be encouraged to increase customers' awareness on the importance of waste reduction, recycling and composting through communication. For example, employees seen actively encouraging customers to bring their own containers could get 'rewards' from the management.

XI. SERVING WARE

As The Beauty Garden will not have a dishwasher, the food would be sold to customers in take-out containers (A. Parr, Personal Interview, February 11, 2008). These containers may be convenient but they fill up landfills overtime (Health Care Without Harm, 2008). In addition, the making of these containers requires the depletion of non-renewable resources, such as fossil fuels (WHCS, 2008). The processes of manufacturing, shipping and disposal of these containers cause air and water pollution, subsequently contributing to the emission of greenhouse gasses and global warming (WHCS, 2008). In helping The Beauty Garden fulfill its sustainability mandate as best as it can, while working with the lack of a dishwasher, we look at environmentally friendly take-out containers and reusable serving ware.

Disposable containers

Bio-based disposable containers are made from renewable materials, such as potatoes, corn and sugar cane waste, and are compostable, contributing less to the landfills (WHCS, 2008). In contrast, fossil fuel-based disposable containers are not biodegradable or compostable in the landmine. Hence, leaching of chemicals, which can affect the environment, can occur (WHCS, 2008).

BioCorp and GenPak are companies that have been manufacturing biodegradable and disposable serving containers. The containers from BioCorp are made from molded cellulose fibers or limestone, without containing any plastic resin. They are biodegradable in active compost systems (BioCorps, 2008). The containers from GenPak are also biodegradable and fully compostable, with the advantages of being oven-ready and microwaveable (GenPak, 2008).

We have learnt from Dorothy Yip that UBC Food Services have been using some biodegradable, disposable containers, but those are some of the other options UBC Food Services can look at (D. Yip, Personal Correspondence, March 27, 2008).

Reusable Serving Ware

We recommend selling reusable serving wares to customers and providing discounts to customers who use them. Using reusable serving ware generates less waste and pollution in the long run (WHCS, 2008). We found one Canadian-based company making reusable serving ware. Impression marketing not only makes its products from recycled material, they are also recyclable (Impression, 2008). They are also customizable with logos and hence, can be used as a marketing tool for The Beauty Garden.

XI. LIGHTING & INTERIOR DESIGN

Lighting

To save energy, we would like to propose the use of energy-efficient lighting and the use of as much natural day-light as possible during the day to reduce the need for electric lighting (Loveland, 2003). It has been estimated that buildings which make full use “of diffuse, well-shaded daylight for illumination” are able to save their electrical energy use by more than 40% (Loveland, 2003).

The plan layout of the outlet shows that most of the walls are full glass and this will enable the outlet to use less artificial light, especially during the Spring and Summer months.

General Electric and Philips have developed a small bi-pin ceramic metal halide (CMH) lamp that can be changed when needed, without changing the rest of the lighting system (Smith, 2006). Reflectors increase the amount of light without extra energy input, and hence, less waste would be generated compared to using normal fluorescent lamps, making it a more environmentally-friendly and sustainable choice of lighting (Smith, 2006). The CMH lamps are also more efficient than halogen lamps, although it is more expensive to purchase (Darragh, 2003). However, the cost would be compensated with the high-energy savings and maintenance costs (Darragh, 2003).

Interior Design

In recent years, concern for the environment has led more architect and interior design companies to devise means of minimizing the environmental footprint through design and material. Patkau, the architect firm working on The Beaty Biodiversity Building, is one such example⁸. This will indubitably have a profound effect on the sustainability of the building and in making The Beaty Garden a revolutionary outlet.

Suggestions

Our team thought of some of the items (namely, lumber, insulation, countertop material, and paints) which may be used for the interior of the outlet, and provide our research on better and more sustainable alternatives.

⁸ Taken from their website: “We refuse singular definitions of architecture: as art, as technology, as social service, as environmental agent, as political statement. We embrace all these definitions, together, as part of the rich, complex and vital discipline that we believe architecture to be.”

a) *Lumber*: Lumber is used in phenomenal amounts, leaving a substantial footprint; underwater-reclaimed wood is a better option, as they help clear waterways and dams, and are environmentally-certified (Triton Logging Inc, 2007).

b) *Insulation*: One sustainable option is the UltraTouch Natural cotton fiber. The insulation is comprised of 85% post-industrial recycled substance and the other 15% is mostly cotton, which does not have any harmful chemicals, VOCs, and irritants (Ultratouch, 2004-2007).

c) *Countertop*: We recommend using certified PaperStone or Squak Mountain Stone slabs for countertop materials. The former is a composite material comprised of 100% post-consumer waste paper and it is claimed to be the “greenest” surface on the market today (PaperStone). The latter is a a composite material as well, but instead of all paper it is includes a mixture of recycled glass, coal fly ash and cement (Squak Mountain stone, 2005).

d) *Paint*: There is a growing concern of use of particular paints, especially those containing volatile organic compounds (VOC), which continue to evaporate even after the paint has dried, posing the threat of in-door air pollution. Many stores now carry low or no VOC in their paints and are relatively cheap.

These aforementioned sustainable building-materials are but a fraction of the choices nowadays consumers have access to, and they all follow the guidelines and criteria set by the BuildingGreenInc, which “include products made with salvaged, recycled, or agricultural waste content; products that conserve natural resources; products that avoid toxic or other emissions; products that save energy or water.” (Lucas, 2008). Furthermore, on the BuildingGreenInc site, there are entire catalogs of sustainable supplies with each a section having a description of the benefits and effects of utilizing these in comparison with the conventional materials.

We also found several interior materials companies in BC which aim to educate and advise consumers on their sustainable products. One such company is GreenWorks Building Supply in Vancouver, an all-green building supply store retailing materials that are either environmentally-friendly produced or reclaimed and recycled, which could be used by Patkau and UBCFS for the interior materials. Although understandably it is very difficult to incorporate sustainable textiles for the entire outlet due to accessibility and affordability of the product, nonetheless, integrating as much of such supplies can help The Beatty Garden's of become as sustainable as possible.

Our Vision for the Interior

We imagine the general feel of the outlet to be tastefully rustic, earthy, and cosy, as suggested by the proposed name, 'The Beatty Garden'. We feel The Beatty Garden's interior should reflect the sustainability theme and connecting the food on consumer's plates to the source – through having quirky and educational quotes and murals on the walls that may inspire people to think about the origins of their food, such as with drawings of tomato plants with labels like in old textbooks (refer to Appendix E). Another idea was to use recycled wooden furniture; not only will this adhere well with the rustic look of the outlet; but it is also made from sustainable material. Upon visiting Aphrodite's, another idea was born: sourcing second hand furniture from thrift stores. To promote The Beatty Garden's presence in UBC and to give the old furniture a new lease of life, we thought it will be a fun idea to have people/artists in the UBC community paint these second hand furniture outdoors by Main Mall.

It is our hope that UBCFS likes our ideas and work with the architects of The Beatty Biodiversity Building to bring this vision to life.

XII: FOCUS GROUP

The purpose of conducting focus groups was to yield qualitative data to find out students' responses to the menu we created, as well as their attitudes towards specific issues

related to sustainability. The focus groups consisted of UBC students, who were selected through emails, on-line posting and in-person recruiting. Our team was divided into three groups and conducted focus groups in the Student Union Building and the Aquatic Center. Three focus groups were conducted with a total of 24 participants. Each of the focus group was lead by two-three facilitators, whose roles were to lead the discussion and note key points. The discussion questions (refer to Appendix B) were developed and used by the facilitators. The discussion guide includes a series of open-ended questions that allow participants to discuss tangential issues. Prior to the discussion state, we introduced ourselves, the UBCFSP, our scenario, and what we were going to do at the focus group. After that, students were asked to sign the consent form if they were agreed to participate. Participants were then asked to take their time to look at our menu and comment on the new sustainable food outlet in general. Discussion was then narrowed into considering questions that were specific to the menu, including attitude towards the more vegetarian menu, price of meals and bring-your-own-Tupperware for discounts. Notes were taken in all groups to highlight key comments. The following is a summary of the focus group findings based on the key comments we got.

Focus Group Findings

Most of the participants said they are interested in eating at The Beaty Garden because of the healthy, appealing, and diverse meals on the menu. In addition, they appreciated the sustainable nature of this food outlet. A variety of responses were received when participants were asked about which feature in the menu stood out for them: a) some indicated the use of unique vegetables, such as yam and squash, makes the menu very special, while a few people did not were not attracted by squash patties and pumpkin soup b) many of them appreciated the 'Zero Mile Monday' idea c) having granola and yogurt, bread pudding were breakfast items people liked d) more male students noticed our menu has few

meat options and would like to have more meat options on the menu e) 'Everyday menu' was indicated to be a popular one f) quite a few participants mentioned that the prices are expensive for students g) the involvement of Cob's Bread on the menu was welcomed by many participants.

Regarding the attitudes towards less meat consumption, the majority of the participants, especially female students, were impartial to the less-meat options. Some of them pointed out more vegetarian options would make this food outlet special. Again, more male students thought having more meat options on the menu would attract more customers. There were few participants who did not know that meat consumption and production are not sustainable until we told them. This highlights the need for education and raising awareness of such issues, in order for a wider range of consumers to patronize The Beaty Garden. In terms of price, many thought that they would pay these prices for a sit-down café, but not for to-go food. In particular, they mentioned that lunch is expensive. After introducing them about the idea of 10-15% discounts on meal for bringing your own containers, everyone seemed to be interested in doing so; some of them said that bringing own containers is also more hygienic. It was demonstrated from the conversations that reminders of bringing Tupperware for the discounts are necessary as students often forget to bring their own containers. Other comments and suggestions regarding the menu include: more advertising for local foods on the menu; alternating days for meals with meat; more familiar names for menu items. For example, some participants didn't know what soba and quinoa are; some students would like to see allergy labels, gluten-free labels and other information labels for the food items; prefer to have some lighter options for lunch as well availability of afternoon snacks; yogurt should be available throughout the day, and not just for the breakfast.

XIV. RECOMMENDATIONS TO THE TEACHING TEAM AND FUTURE AGSC450 GROUPS

Throughout the paper, we have been providing recommendations to UBCFS with regards to The Beaty Garden. However, due to time constraints, we acknowledge the limited scope of our business plan. We present the following recommendations for the teaching team and future AGSC 450 groups, to expand on our findings, and to provide further recommendations for UBCFS to make The Beaty Garden as sustainable as possible.

a) *Narrowing the focus to enhance collaboration between AGSC450 groups for future scenarios*

For future scenarios as wide scoped as this, we suggest to the AGSC 450 teaching team for components of the business plan to be broken down into different scenarios and this could be a collaborative project of all the groups to derive one business plan or have one group focus on one per component of the business plan. We felt it was hard to collaborate between groups of the same scenario because it was almost like a competition between groups to develop the 'best' business plan.

b) *Training Program for Staff*

We recommend to the teaching team to create a scenario for future AGSC 450 groups to look into designing a training program for UBCFS staff.

We believe it is important for the staff of UBCFS (not just staff at The Beaty Garden) to understand the concept of sustainability and its relevance to the food system. People in the food industry can help to reduce the greenhouse gases emitted by the food system through their work roles, and can also be advocates for a sustainable food system, when they engage in conversation with customers.

Hence, it is essential to empower them with knowledge and skills that contribute to enhancing the sustainability of the food outlets on campus.

c) *Develop an on-going sustainability awareness and education campaign/program*

Based on the results of our focus groups, it is clear there are many people within the UBC community who do not understand the importance of sustainability and the role food (such as local food and a less meat-based diet) can play in building a sustainable UBC. With new students and faculty coming in every year, there is a need to have an on-going campaign/program to raise awareness about sustainability issues. Future AGSC 450 students could work with certain groups and special events on campus, such as residences and Responsible Consumption Week, to develop such a campaign or program.

d) Further develop the menu

Further development of the menu can be made by future AGSC students, such as developing a drinks menu – to perhaps including smoothies with seasonal fruits and not having canned drinks such as coke.

e) Bridge more connections between the UBC Campus and the Farm, using The Beaty Garden as a medium

The Beaty Garden can play an important role in promoting and fundraising for the Farm. Future groups can look into furthering the relationship between the UBC Farm and The Beaty Garden. Some ideas we had include having events such as Open Mic night or opening The Beaty Garden at night to small community fundraising events, featuring the UBC Farm food.

CONCLUSION

The UBC Food Systems Project marks an important step in UBC's movement towards a more sustainable and carbon-neutral future by recognizing the role food plays in sustainability. Through our report to UBCFS for the design of the first profitable sustainable restaurant on campus, we provided recommendations and ideas on the menu, serving ware, interior design, promotion and education tools. We feel these could aid UBCFS to establish an outlet that can potentially model as a leader for food outlets on all university campuses. Eventually, we hope that all food outlets on campus will adopt more of such sustainable

measures through overhaul changes as the university expands in the 21st Century. At the same time, we look forward to more food outlets taking more active roles in encouraging individual behaviour changes in diet to reflect strong interconnectedness with the environment. We hope the recommendations and ideas will be adopted by UBCFS, the other partners of this development, the AGSC450 teaching team, and future students.

REFERENCES

- Bentley, S., & Barker, R. (2005). *Fighting Global Warming at the Farmer's Market: The Role of Local Food Systems in Reducing Greenhouse Gas Emissions. A FoodShare Research in Action Report*. Toronto: FoodShare. Retrieved on March 1, 2008, from <http://www.orgicconsumers.org/environment/ACF230.pdf>
- BioCorps. Retrieved March 11, 2008, from <http://www.biocorpaavc.com>.
- Certified Organic Associations of British Columbia. *Provincial Organic Statistics 2005: British Columbia*. Retrieved on March 14, 2008, from <http://www.certifiedorganic.bc.ca/pdf/StatsBC2005.pdf>.
- content, ARA. (2008, March 19). Simple green building options. *Vancouver 24HRS*, p. 14.
- Darragh, S.L.C. Ceramic metal halide. In *Lighting Design Lab News*. Retrieved April 1, 2008, from http://www.lightingdesignlab.com/ldlnews/ceramic_metal_halide_sd.pdf.
- Fiksel, J. (2001). Emergence of a sustainable business community. *Pure and Applied Chemistry*, 73, 1265-1268.
- GenPak. Retrieved March 11, 2008, from <http://www.genpak.com>.
- Glen Valley Organic Farm Co-Operative. *Co-Op Intro*. Retrieved on March 31, 2008, from <http://www.gvofc.org>.
- Group 6. (2007). Scenario 4: Bringing Local Food to UBC Campus. AGSC450, 2007.
- Group 17. (2007). Scenario 3: Incorporating UBC Farm Items into Campus Food Provider Menus. AGSC450, 2007.
- Group 19. (2007). Scenario 7: Increasing Education, Awareness, Participation and Effectiveness in Composting on Campus. AGSC 450, 2007.**
- Group 21 (2007). Scenario 7: Increasing Education, Awareness, Participation and Effectiveness in Composting on Campus. AGSC 450, 2007.**
- Group 23 (2007). Scenario 7: Increasing Education, Awareness, Participation and Effectiveness in Composting on Campus. AGSC 450, 2007.**
- Gunningham, N., Kagan, R. A., & Thornton, D. (2003). *Shades of Green: Business, Regulation, and Environment*. Palo Alto, CA: Stanford University Press.
- Health Care Without Harm (HCWH). *Choosing environmentally preferable food service ware – reusable and sustainable biobased products. Health Care Without Harm Online Archives*. Retrieved March 11, 2008, from <http://www.noharm.org/details.cfm?ID=1456&type=document>.
- Impression Marketing. Retrieved on April 2, 2008, from <http://www.impression.ca/>
- Kloppenborg, J., Lezberg, S., De Master, K., Stevenson, G. W., & Hendrickson, J. (2000). Tasting Food, Tsating Sustainability: Defining the Attributes of an Alternative Food System with Competent, Ordinary People. *Human Organization*, 59, 177-186.

- Loveland, J. Daylight by design. In *Lighting Design and Application*. The Lighting Design Lab. Retrieved April 1, 2008, from http://www.lightingdesignlab.com/ldlnews/Daylighting_by_Design.pdf.
- Pollan, M. (2006). *The Omnivore's Dilemma: a Natural History of Four Meals*. New York, NY: Penguin Press.
- Restaurant Waste Reduction. (1999). Retrieved on April, 2, 2008, from <http://www.p2pays.org/ref%5C03/02790.pdf>.
- Rojas, A., Richer, L., & Wagner, J. (2007). University of British Columbia Food System Project: Towards Sustainable and Secure Campus Food Systems. *EcoHealth*, 4, 86-94.
- Smith, R. (2008). New tech: small ceramic metal halide. In *Lighting Design Lab News*. Retrieved on April 1, 2008, from http://www.lightingdesignlab.com/ldlnews/win2006_env_effects.pdf.
- Sprouts. (2008). *About Us*. Retrieved on 9 March, 2008, from <http://www.ams.ubc.ca/clubs/nfc/about.html>
- Stringer, E. T. (1999). *Action Research*. London: Sage.
- The 100 Mile Diet. Retrieved on March 10, 2008, from <http://www.100milediet.org>
- UBC Food Service. (2008). *UBC Food Services Sustainability Initiatives*. Retrieved on April, 2, 2008, from, <http://www.food.ubc.ca/about/initiatives.html>
- UBC Responsible Consumption Week (2008). Retrieved on April, 1, 2008, from, <http://www.ubc-rcw.org/index.html>
- UBC Waste Management. (2008). *Composting*. Retrieved on April, 1, 2008, from <http://www.recycle.ubc.ca/compost.htm>
- Walley, N., & Whitehead, B. (1996). It's Not Easy Being Green. In Starkey, R., Starr, R., & Welford, R., *The Earthscan reader in business and the environment*. (pp. 36-40). London. EarthScan.

APPENDIX A: EXAMPLE MENUS



Winter Menu

Opening Hours: 8am-5pm

Monday to Friday

*Breakfast served until 11am

Every Monday is ZERO MILE MONDAY, featuring food from the UBC Farm

Monday	Breakfast Special:	2 Vegan Pancakes w/ maple syrup \$3.99
	Lunch Special:	Butternut Squash and Caramelized Onion Gazette \$10.95
	Soup:	Split Pea Soup Small \$3.75 Large \$5.75
Tuesday	Breakfast Special:	Cajun Spaghetti Squash Patties \$3.99
	Lunch Special:	Glazed Pumpkin and Rosti \$8.95-\$9.95
	Soup:	Pumpkin Soup Small \$3.50 Large \$5.50
Wednesday	Breakfast Special:	2 Oatmeal Pancakes w/ Strawberries \$3.99
	Lunch Special:	Pumpkin Coconut Curry with Rice \$9.95-\$10.95
	Soup:	Potato Goulash Small \$3.50 Large \$5.50
Thursday	Breakfast Special:	2 Blueberry Maple Breakfast Bread Pudding \$3.99
	Lunch Special:	Winter Vegetable Hash with Quinoa \$8.95-\$9.95
	Soup:	Portuguese Kale Soup Small \$3.50 Large \$5.50
Friday	Breakfast Special:	2 Buckwheat Corncakes w/ Maple Syrup \$3.99
	Lunch Special:	Spicy Chicken Pesto Soba \$9.95-\$10.95
	Soup:	Winter Squash w/ Peanut Soup Small \$3.50 Large \$5.50
Everyday	Breakfast:	a) Choice of yogurt, Seasonal & Dried fruit, Granola \$5.50 b) Fruit Toast (COBS) w/ Honey \$2.50
	Lunch:	a) Made The Way U like: Sandwiches & Wraps \$5.25 b) Baked Yam/Sweet Potato Fries \$4.50 c) Weekly Salad \$5.50
	Desserts/Snacks:	Choice of baked goods and COBS breads

We aim to use food produced through sustainable practices and to keep our ecological footprint as little as possible.



Summer Menu

Opening Hours: 8am-5pm

Monday to Friday

Every Monday is ZERO MILE MONDAY, featuring food from the UBC Farm

Monday	Breakfast Special: Lunch Special: Soup:	Savoury Asparagus Bread Pudding Orange and Rosemary Roasted Chicken with Saffron Rice and Smoky Red Pepper Sauce Lentil Soup
Tuesday	Breakfast Special: Lunch Special: Soup:	Wholegrain Pancakes w/ Blueberry Maple Syrup Caramelized Tofu (with brown rice) Rustic Potato Chowder
Wednesday	Breakfast Special: Lunch Special: Soup:	Tuscan Scrambled Eggs on Toast Whole Wheat Pasta with Cauliflower, Walnuts and Ricotta Salata Armenian Apricot Soup
Thursday	Breakfast Special: Lunch Special: Soup:	Cilantro Frittata Tomato-Tofu (or Chicken) Kebabs Corn & Potato Chowder
Friday	Breakfast Special: Lunch Special: Soup:	Sour Cream Waffles Lemon Sesame Quinoa Spinach & Zucchini Soup
Everyday	Breakfast: Lunch: Desserts/Snacks:	a) Choice of yogurt, Seasonal & Dried fruit, Granola b) Fruit Toast (COBS) w/ Honey a) Made The Way U like: Sandwiches & Wraps b) Baked Yam/Sweet Potato Fries c) Weekly Salad Choice of baked goods and COBS breads

We aim to use sustainably produced food and to keep our ecological footprint as small as possible.

APPENDIX B: FOCUS GROUP QUESTIONS

(Menus are distributed to the participants and they are given time to review the menu and the prices)

Questions by facilitators:

- Would you want to eat at this place? Why?
- What stands out for you?
- Did you notice the menu has few meat options? We're thinking of shifting our menu away too much meat because meat consumption and production is rather unsustainable. What do you think?
- Do you think it's reasonable to pay those prices at a UBC restaurant? Especially for local and possibly organic food which costs more, would you be willing to pay for it?
- Would you bring your own container knowing there is a discount and that it is only a to-go restaurant?

APPENDIX C: FOOD DISTRIBUTORS INFORMATION

1. Organica

- Supplies a wide variety of produce and food
- Contact person: Rachel Sutton, [REDACTED]

2. Pro-Organics

- Supplies a wide variety of produce and food
- Delivers to Aphrodite's & Sprouts at UBC
- Deliver to UBC area from Monday to Friday
- Orders must be placed by phone or fax a day before delivery - before 4 p.m. Monday to Thursday and until noon on Friday. Minimum Order for free delivery of \$200. Need to set up account first.
- Contact person: John M Benedetti, VP Sales, [REDACTED]

3. COBS Breads

- Australian company but uses Canadian ingredients as much as possible
- To order, call or email Jeff the day before delivery
- Contact person: Jeff Laderoute, [REDACTED]

4. UBC Farm

- Supplies produce & eggs
- Delivers to campus every Friday
- Email Amy Frye, the marketing coordinator of the UBC Farm [REDACTED]

APPENDIX D: PROMOTION TOOLS

1) 'Friends of The Beatty Garden' card

An initiative to encourage people to bring their own utensils

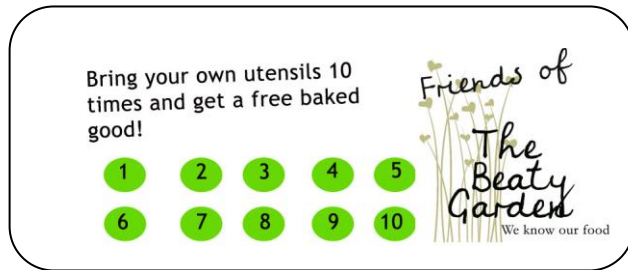


Fig D1: 'Friends of The Beatty Garden' card

8 Reasons to Eat *Local*

- 1** You 'eat' less oil because your food travels less to get to you [so less fossil fuels are burnt]. Food transport contributes a significant amount of greenhouse gases!
- 2** You support the local farms & hence, the local economy.
- 3** You know what you're eating because you can go visit the farms when in doubt!
- 4** You eat fresher foods that taste better with the shorter travel time to your plate!
- 5** You help to encourage responsible land development by giving a viable reason for land to remain being used for farms.
- 6** You can eat with a clearer conscience because you know the food you ate has minimal impact on the environment!
- 7** Local food is less susceptible to bio-terrorism as the shortened travel time reduces the likelihood of contamination.
- 8** You get to know your neighbours as you're more likely to establish a relationship with people at farmers' markets than people at the supermarket!

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Fig D2: '8 Reasons to Eat Local' Poster

APPENDIX E: SUGGESTED MURALS FOR INTERIOR OF THE BEATY GARDEN

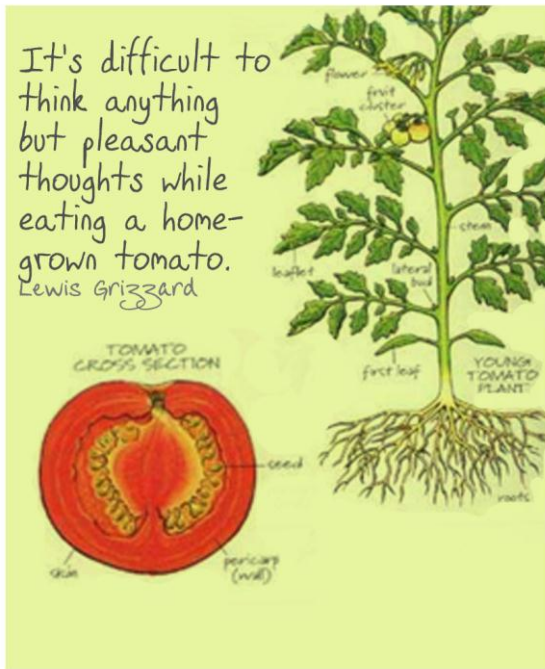


Fig E1 Suggested wall mural

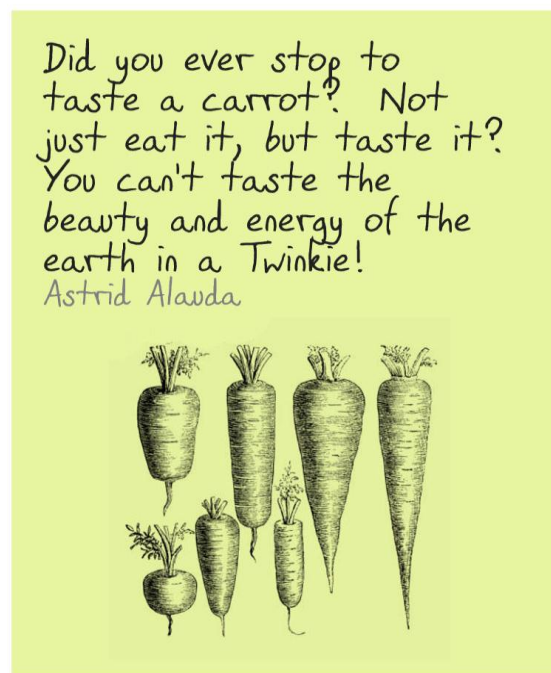


Fig E2 Suggested wall mural

APPENDIX F: RECIPES

We only put in 2 recipes in this report. For more of the recipes in the menu, please email Karen Rideout. In the speech bubbles, we provided some facts about feature ingredients that may be displayed on the LCD screens.

Cajun Spaghetti Squash Breakfast Patties

1 Spaghetti squash, split & baked
1 tsp. Garlic powder
1/2 cup Green Onions, chopped
1/2-1 tsp. Cayenne pepper
1 Tbsp. Rosemary, crumbled
1/2 tsp. Sea Salt
1 Tbsp. Black Pepper
pinch of Paprika
1 tsp. Onion Powder
Soy yogurt, or sour cream, as garnish

Spaghetti squash contains many nutrients including folic acid, potassium, vitamin A, and beta carotene. It is low in calories, averaging 75 calories in 8 cooked ounces.

Preheat oven to 350°. Split the squash along the length, use a spoon to scoop away the seeds, and lay the squash cut side down, in a baking dish. Pour 1/2 inch of water onto bottom of the baking dish. Place dish into preheated oven, and bake for 30-35 minutes, until squash shell is tender when pricked with fork. Remove from oven, and allow to cool.

Chop the onions and set aside, then mix the dry seasonings together in a small bowl. Scoop out the cooked squash by running a large spoon along the inside edge of the squash rind, loosening the soft flesh. Turn the pulp out into a medium size mixing bowl. Use a fork to break up the spaghetti-like strands of squash, then gently fold the chopped onions and seasonings into the pulp.

Preheat a large frying pan, over medium high heat, and add a little olive, or sesame oil evenly to the bottom of pan. Use your hands to scoop out a golf ball sized portion of the squash, and shape into a flat patty. Fry in hot oil for several minutes on each side, until golden brown and crispy. Serve hot, garnished with a little soy yogurt, or sour cream, and chopped parsley. Steamed spinach makes a great side dish for this breakfast, which can also be served as an easy, spicy light lunch or dinner.

Caramelized Tofu

7 - 8 ounces extra-firm tofu cut into thin 1-inch segments
a couple pinches of fine-grain sea salt
a couple splashes of olive or peanut oil
2 medium cloves garlic, minced
1/3 cup pecans, toasted and chopped
3 tablespoons brown sugar
1/4 cup cilantro, chopped
1/2 lb. brussels sprouts, washed and cut into 1/8-inch wide ribbons

Brussel sprouts are a good source of Vitamin C

Cook the tofu strips in large hot skillet (or pot) with a bit of salt and a splash of oil. Saute until slightly golden, about 4 minutes. Add the garlic and pecans, and cook for another minute. Stir in sugar. Cook for another couple of minutes. Remove from heat and stir in cilantro. Scrape the tofu out onto a plate and set aside while you cook the brussels sprouts. In the same pan, add a touch more oil, another pinch of salt, and dial the heat up to medium-high. When the pan is nice and hot stir in the shredded brussels sprouts. Cook for 2 - 3 minutes, stirring a couple times (but not too often) until you get some golden bits, and the rest of the sprouts are bright and delicious.

