

The Land and Food System (LFS) Cropedia – Creating an UBC Urban Agriculture Educational Resource

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LFS 450 University of British Columbia Food System Project (UBCFSP)

Scenario 6. The Land and Food System (LFS) Cropedia – Creating an UBC Urban

Agriculture Educational Resource

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ABSTRACT

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This paper identifies current problems that are faced by the world's food systems, and highlights the disconnections that we as a society have from our food. Our project was to create an online database called Cropedia— an online resource of forty-four UBC-grown crops. This site is dedicated to promoting urban agriculture from here. It was put together by UBC Land Food Systems students enrolled in LFS 450. Forty-four different crops were assigned to four groups, and were split up randomly— the goal of the project was to take each individual crop and create its own Wikipedia-like webpage with information regarding its growing condition and seasonality, nutritional information, recipes, usage inventory and academic connections. As a database, it easily allows anyone to have access to information and utilize it in an educational or 'hands-on' way. This database will allow users to make more informed choices about their food, and it also increases involvement with the food that they are consuming. We hope that the creation of our Cropedia will encourage users to start growing their own food— as many of the crops have directions for growing as well as tips for harvesting, etc. Our goals included, creating a user-friendly database of UBC grown foods, to promote locally grown food at UBC, provide an informative agriculture resource for DIY growers and UBC Farm market consumers and most importantly, to connect community, land and food systems at a local and possibly global level.

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Introduction

This paper illustrates major problems faced by the current global food systems and the disconnection between this food system, our land and the community. It also presents our group's (Group 3) position and vision statement with regards to the seven goals of the University of British Columbia Food System Project (UBCFSP). Moreover, this paper describes the process of creating an urban agriculture educational resource: The Land and Food System (LFS) Cropedia website. The aims of the LFS Cropedia site are to (1) provide a user-friendly and standardized data base of UBC grown foods that everyone can have access to; (2) create awareness of locally food grown at UBC; (3) inform volunteers and customers of Agora Café, AgUS, Sprouts, the UBC Farm and the LFS Orchard Garden (LFSOG) on information of a specific crop's seasonality, growing conditions and nutrition, etc.; and (4) promote connection of community to land food systems, specifically local-in-season crops at UBC Farm. Challenges encountered during research will also be mentioned. This paper ends with specific recommendations for future LFS 450 colleagues, mainly in terms of improvement that can be made to the current structure of the LFS Cropedia site, and also recommendations to UBC Waste Management and UBC Food Services.

Problem Definition

Disconnection From Food

The majority of the global food system is based on processed food and industrial farming, a distinct shift in dietary trends is evident. Supermarkets and grocery stores predominantly market shelf-stable food products because they offer convenience to

consumers and profits to producers. By selecting these types of food products regularly, consumers are building an imaginary dependence on processed foods and simultaneously becoming disconnected from wholesome and nutritious foods, and its origins. This loss of knowledge and changes in our food environment also highlights the difficulty of supporting local in season food.

Availability of Food

Although fruits and vegetables are recognized for being low in calories and rich in nutrients, the time required for their preparation, and their marginally higher cost compared to processed foods may discourage their consumption. Further, low income households tend to focus their buying power on bulk food items that fill them up (Lin *et al.*, 2005). Apart from the consumption of processed foods being a concern, an unequal distribution of food throughout the global food system results in underfed and overfed people, this needs to be addressed. In Canada, obesity rates have increased dramatically over the past 25 years with poor eating habits and physical inactivity being two of the main culprits. It has been suggested that the availability of a wide variety of inexpensive food has made it challenging to maintain a healthy weight (Health Canada, 2006).

Climate Change

The consequences of supporting the mass production of processed foods and industrial farming needs to be raised due to its inconspicuous and detrimental impact towards the Earth's ecological health. The global food system plays a significant role in contributing to greenhouse gas (GHG) emissions because the import and export of food

now accounts for more than a quarter of the goods being transported within North America. These GHG emissions are toxic to the environment because they contribute to air pollution, acid rain, and climate change (Get Local, 2008). Thus, this will have negative long-term effects on natural ecosystems, agriculture, and human health (Copen & Hopwood, 1998). Ultimately, the relationship between land, community, and food is interconnected such that its activities directly affect climate change.

UBC's Participation in Sustainability

At UBC, the establishment of the UBC Farm has contributed to the localization of our food system by providing food to the UBC campus community through food venues such as AMS Food and Beverage Department food outlets, UBC Food Services residences and food outlets, Agora Café and to the community through farm market sales and sales at Sprouts Natural Food Coop. Land and Food Systems Orchard Garden (LFSOG) also contribute to local food consumption by aiming to provide food to the LFS community via Agora Café and AgUS. Similar to FFCF, opportunities are created for communities to learn about growing their own food and this will subsequently contribute to small scale/urban sustainable food production and regional food security. The success of the LFSOG and the UBC Farm demonstrates that a local, sustainable food system can be achieved by connecting community, land and food systems.

Despite the positive operations of the UBC Farm and LFSOG, the production of food and preparing local seasonal based foods requires a wealth of experience and knowledge. For example, it is difficult to find straightforward, reliable and accessible information on how plants can be grown and whether it is suitable based on British Columbia's climate. Those that want to become an informed eater and be more involved

with their food choices are restricted by this lack of plant information. Hence, a user friendly, accessible, and easy to read information is needed to encourage and educate others to eat more sustainably.

Vision Statement

The creation of Cropedia as an online urban agricultural educational resource will encourage and educate individuals within our UBC community to eat more sustainably by developing an understanding of the origin of food. As a stepping stone, Cropedia can facilitate others to become more engaged with their land, community and food by enabling opportunities to browse and learn about the vast variety of crops that are grown at UBC Farm and LFSOG. The information provided on Cropedia covers the core of how to grow these crops, including: years grown at UBC Farm/ LFSOG, growing conditions, seasonality, nutrition, additional usage, academic connections, recipes, and additional notes. For Cropedia to thrive, it needs to be continuously improved, updated and regulated for the community to be valued as a reliable resource, rather than be regarded as a one-time resource only. Ultimately, Cropedia can be used as a guide to promote the well being of the land, community and food as a whole because it helps users make informed food choices.

Methodology

Project Setting

Agora Café from the Faculty of Land and Food System and other stakeholders that depend on the food produced by the LFS Orchard Garden and the UBC Farm requested for an electronic guide that presents and informs them with important crop

information. Four groups (3, 16, 18 and 21) from LFS 450 *Land, Food, and Community III* 2009 Winter class were assigned to complete this task. A planting log which consists of 44 crops was received from the UBC Farm. Each group randomly selected 11 crops to research on (Table 1). Within groups, each member was assigned to specific crop(s). One communicator officer was chosen per group to facilitate inter-group communication. Big group meetings were held every Wednesdays (from January 20, 2010 to March 24, 2010) to coordinate timeline and to meet milestones for the project as a unified scenario group.

	Group 3 (our group)	Group 16	Group 18	Group 21
Crops	Asparagus	Arugula	Apples	Basil
	Broccoli	Beets	Blueberries	Bush beans
	Cabbage	Carrots	Filet bean	Garlic
	Cauliflower	Chards	Parsley	Oregano
	Cherry tomato	Eggs	Raspberries	Pole beans
	Cucumber	Head lettuce	Savory	Potatoes
	Fresh shelling beans	Kale	Snow peas	Radishes
	Kohlrabi	Pumpkins	Sugar snap peas	Rhubarb
	Leek	Spinach	Thyme	Rosemary
	Sweet corn	Squash	Tomatillos	Sweet potatoes
	Sweet onion	Strawberries	Zucchini	Tomatoes

Table 1. Distribution among groups of the 44 crops received from the UBC Farm.

The electronic Cropedia template was created by the Multimedia Developer, Duncan McHugh. He also gave a presentation about the background on creating the electronic Cropedia on January 27, 2010.

The Cropedia link is http://cropedia.landfood.ubc.ca/wiki/Main_Page. Each group was required to post information of the assigned 11 crops onto the specific crop page by

following the template. Hyperlinks were used to link pages together, as well as to other relevant electronic resources. Details included for each crop were:

1. picture,
2. years grown at UBC Farm and LFSOG
3. growing conditions,
4. seasonality,
5. nutritional information,
6. recipes,
7. additional usage inventory,
8. academic connections,
9. references, and
10. additional notes.

All groups used the same nutrition fact panel with information obtained from the Canadian Nutrient file (Health Canada, 2009).

Meetings on Wednesdays included two interviews with collaborative research partners and/or stakeholders, one with Jay Baker-French from the LFSOG (March 9, 2010) and the other (March 17, 2010) with Amy Frye, the marketing coordinator of UBC Farm. The purposes of the interviews were to obtain useful and additional crop information from them and to ask them on any other specific information that they would like to see on the Cropedia site. Jay gave us information about the LFSOG and brought up his concern as to how the Cropedia site is going to stay current.

Group 3 Procedures

Our group consisted of 6 members, each with different academic program specialization. They are Betsy, Neale, Rachelle, Ruth, Sasha and Tiffany. Ruth was chosen to be the communication officer. After the 44 crops were divided among groups, so that each group had 11 crops to research on, each of our members was responsible for specific crop(s) (Table 2).

Group members	Crops
Betsy	Cabbage, cauliflower
Neale	Broccoli, leeks
Rachelle	Asparagus, kohlrabi
Ruth	Fresh shelling beans
Sasha	Cucumbers, sweet corn
Tiffany	Cherry tomato, sweet onion

Table 2. Crop distribution within Group 3

Resources that our group used to find information on growing conditions, seasonality, recipes and usage inventory for the assigned crops were internet, eBook, electronic and non-electronic articles/journals and books. cIRcle, a UBC digital repository for research and teaching materials at <https://circle.ubc.ca/> was also a great online source. Numbers of years that the crops have been growing at UBC Farm, growing difficulties and academic connections were provided by Tim Carter, the production coordinator of UBC Farm. Andrew Rushmere, academic coordinator of the UBC Farm gave us some perspective on whom he felt would most benefit from Cropedia. Some of the growing conditions information was gathered from interviews with non-stakeholder, a representative from West Coast Seeds. Agora Café, campus organic deli and capers managers supplied us with recipes idea and produce-used. Interviews with

Baker-French from the LFSOG and Amy Frye, the marketing coordinator from the UBC Farm also provided us with crop information.

Besides the meetings within our group and among other scenario 6 groups, the UBC Vista site was the main tool used to plan and facilitate meetings. Scenario 6 discussion board, group 3 discussion boards and mailbox provided a forum for group members to discuss concerns and resources about each crop and the Cropedia site. We were able to work cooperatively in interdisciplinary groups to solve problems such as technological difficulty when putting information on the Cropedia site, finding recipes that apply to a large span of people (in terms of dietary requirements/ preferences) and coordination between four groups.

Progress Management and Organization

Ground rules, timelines and deadlines were strategies used to organize the group and to meet specific deadlines. Our first progress report was submitted on February 10, 2010 to allow our LFS 450 course instructor, Andrew Riseman, to keep track of our progress and to know our anticipated challenges and any problems that our group faced. A final report outline was also submitted to Dr. Riseman on March 23, 2010, as a further update on our progress. The template for the Cropedia site was strictly followed to ensure each page is uniform, and had a standard presentation form for its nutrition facts table. Team members checked on each other's work to refine findings and to ensure consistency among our work.

Results

The result of our group's work was the completion of 11 pages in the LFS Cropedia site, each focusing on a specific crop. Below are the highlights of the 11 crops assigned. For more specific crop information, please visit the Cropedia site.

Asparagus

Asparagus is considered to be moderately difficult to grow, as it takes three years of care before it can be harvested. The seeds are first planted indoors between February and May, before being transported as seedlings into well-drained soil that should be fully exposed to the sun. If well taken care of, plantings can last for decades. Asparagus is an excellent food choice as it is free of fat, sodium, and cholesterol; it is also a source of fibre, Vitamin C, and iron.

URL: <http://cropedia.landfood.ubc.ca/wiki/Asparagus>

Broccoli

Broccoli, also known as *Brassica oleracea Italica*, has been cultivated for over 2000 years. One could justify this for health reasons alone, one serving provides over 100% of daily vitamin C requirements and it contains phytonutrients, which have proven cancer-fighting properties. Since there are two main types of broccoli: Italian, harvested in the summer/fall and over- wintering, harvested in the spring, fresh broccoli can be enjoyed for much of the year. Growing broccoli is moderately difficult; it requires fertile, moist, non-acidic soil and may benefit from cover crop use as discovered by UBC farm researchers in 2005.

URL: <http://cropedia.landfood.ubc.ca/wiki/Broccoli>

Cabbage

Cabbages are available all year round and their growing conditions are similar to broccoli and cauliflower because they all classified as Cole crops. Prior to being planted to the ground, it requires at least 24 inches of space between each cabbage plant. The two most common diseases associated with cabbages are purple blotch and clubroot. Pest damage can be avoided by controlling the growth of weeds and utilizing floating row covers; also, pest build up can be reduced via crop rotation. As an excellent source of minerals, vitamin A, vitamin C, and B vitamins, cabbages are also available in many varieties, such as napa, savoy, red cabbage, etc.

URL: <http://cropeia.landfood.ubc.ca/wiki/Cabbage>

Cauliflower

The creamy whiteness of cauliflower is induced via blanching; hence, it does not only exist as white varieties, it is also available as purple or orange varieties. Crop rotation more than once every 3-4 years would be an effective means of reducing disease and insect problems. For early varieties, floating row covers should be used because its shallow roots tend to be susceptible to root maggots. Lastly, this vegetable is an excellent source of vitamin C, high in B6 vitamins, folate, and it is a source of dietary fiber.

URL: <http://cropeia.landfood.ubc.ca/wiki/Cauliflower>

Cherry Tomato

The cherry tomato is a relatively sweet and small variety of tomato that UBC farm has been growing for 10 years. It is difficult to grow because this variety is very sensitive

to excessive moisture, so optimum moisture and pH level must be carefully monitored to get high quality tomatoes. Of all the tomato varieties, cherry tomatoes have the highest Vitamin A and C content, as well as dietary fiber, and it is characterized by relatively high antioxidant levels. It is better to grow cherry tomato under cover, and currently, UBC farm is planning experimental use of vetch as cover crop.

URL: http://cropeia.landfood.ubc.ca/wiki/Cherry_tomato

Cucumber

The cucumber is a semi-tropical vegetable that grows best in hot summer months as it is unable to tolerate frost. Low temperatures impede their growth and production of fruit. Cucumbers are composed of about 90% water and are a healthy nutritious low calorie food. They are also a good source of biotin and beta carotene. Cucumbers belong to the Cucurbitaceae family which also included melons, pumpkins, and squashes. All of fruits from this family are referred to as cucurbits and grow from vines originally from desert plants. Cucumbers, scientifically known as *Cucumis sativus*, are divided into 2 general groups: slicers for slicing and ‘picklers’ for pickling.

URL: <http://cropeia.landfood.ubc.ca/wiki/Cucumber>

Fresh Shelling Beans

Shelling beans are a fall treat that the UBC farm has been growing for two years. Shelling beans need warm soil, and require ambient temperatures around 25 Celsius. It is essential that the beans have well drained soil that is rich in organic matter.

pH should range between 6.0 and 7.5-lime can be worked into the soil if the soil is too acidic. Avoid excess of fertilizer added to the plots because a low yield of beans will result. As bean seeds do not grow very well in soggy soils, this should be avoided at all costs when managing bean seeds. Shelling beans are an excellent source of Vitamin C, and should be eaten raw to fully utilize all the available nutrients.

URL: http://cropedia.landfood.ubc.ca/wiki/Fresh_Shelling_Beans

Kohlrabi

Kohlrabi has two planting seasons: between early-April and mid-May and between mid-July and early-August. Planting in between these two planting seasons could result in inferior crops. Kohlrabi is considered to be relatively easy to grow, but its soil should be well-drained, high in organic matter, and with a pH between 6.0 and 7.5. It is a very healthy food choice as it is free of fat and cholesterol, is a high source of fiber, and has over 100% of one's daily requirement of Vitamin C.

URL: <http://cropedia.landfood.ubc.ca/wiki/Kohlrabi>

Leeks

Leeks are scientifically known as *Allium ampeloprasum porrum*, they were first cultivated by the ancient Egyptians 4000 years ago. At UBC leeks have been grown only during the past two years. Leeks are harvested in the fall and spring, depending on the type. They are very slow growing and require special trenching techniques. Like other alliums, including garlic and onion, leeks have anticancer, antiasthmatic, and antibiotic properties known to promote human health. Leeks also have symbolic importance; they are worn each year on March 1st to celebrate St. David's Day, the Welsh national holiday

and at international rugby games held in Wales since they are one of that country's national emblems.

URL: <http://cropeia.landfood.ubc.ca/wiki/Leeks>

Sweet Corn

Sweet corn is the result of a gene mutation that occurred sometime in the 1800s in the United States. As a result this mutation prevents the sugar in the endosperm of the kernel from being converted to starch thus increasing the sugar concentration per kernel and the sweetness. The seeds of sweet corn are smaller than regular corn and tend to have more seeds per round. Sweet corn also requires twice as much moisture for germination than regular corn and should not be subjected to dry soil planting. Planting of seeds in a uniform depth and on the shallower side is also more important with this type. When the ear silks have begun to dry and brown and the kernels appear full and "milky", it is time to harvest the corn.

URL: http://cropeia.landfood.ubc.ca/wiki/Sweet_Corn

Sweet Onion

Sweet onion is known for its mild and sugary taste and has been grown at UBC farm on and off for 5 years. This crop is resistant to most pesticides and disease, but wire worms and weeds have presented challenges at the UBC farm. It is recommended to sow seeds indoors, as this is the easiest way to grow bulb onions. Sweet onion is a spring/summer onion that is a good source of Vitamin A and C with antibacterial properties. Onion extract are reported to have lipid-lowering effects, so the rise of serum cholesterol and accumulation of lipid in the aorta may be prevented.

URL: http://cropeia.landfood.ubc.ca/wiki/Sweet_Onion

Discussion

A User-friendly Data Base of UBC-Grown Foods

Cropedia is an easy-to-use database of the LFSOG and UBC Farm grown foods; it is valuable in raising awareness of local food production potential and its benefits. The information provided on this site is helpful to players in the UBC food system and the public at large in making well informed decisions regarding the production and consumption of these foods. Cropedia also serves as a new interface linking local and global communities to the UBC community and its sustainability initiatives. As a user-friendly database of UBC grown foods, Cropedia helps to empower UBC food partners and collaborators in transitioning towards sustainability. The ‘architecture’ of Cropedia resembles that of the popular website, Wikipedia; by following this template Cropedia has a familiar feel to it. This allows new users from a wide range of backgrounds to access detailed information on UBC grown foods.

Promote Locally Grown Food

In the past, this information was essentially inaccessible to all but the most diligent and determined. Now it is all pooled together, helping to create an awareness of the diversity of food produced at UBC and the potential for others to grow food locally. Cropedia provides a census of UBC grown foods which is valuable in its own right in assessing UBC’s sustainability. UBC food partners and collaborators can use this site to help guide their food sourcing decisions and identify possible academic and business oriented endeavors. Since Cropedia is strictly dedicated to UBC grown crops, any

initiatives that develop from its users will likely stimulate more activity tied to these crops. The more these crops are incorporated into the UBC food system, the more sustainable it will become. Similarly, once consumers discover Cropedia and the produce available from UBC, they may start to become more aware of these particular crops in the meals that they eat. If they realize that these foods can be grown in the Lower Mainland, this may cause them to question whether or not their food came from local sources, and if they are not, this could lead to an increase in demand for these local food items.

A Resource for DIY Growers and UBC Farm Market Consumers

Cropedia also plays a role in promoting sustainability beyond the UBC campus by helping do-it-yourself (DIY) growers grow food on their own. The growing conditions found on the UBC campus are representative of the conditions found throughout the South coast of BC. Thus, the crops grown at UBC can be grown throughout this region. Many people may not be aware of how much potential there is to grow so many fruits and vegetables in our region. Cropedia not only provides insight to this, it also provides detailed growing information on growing each crop. An important aspect of growing each crop is its seasonality, i.e. when to sow and harvest a given crop. This is important to growers as well as consumers, such as those that support the UBC farm market.

Cropedia is a valuable resource for these consumers since it provides key information on when and what to buy at the UBC farm market. Some of the crops and/or varieties grown at the farm may not be familiar to those used to shopping at conventional grocery stores, so selection, handling, and storage of these foods can be daunting to the uninitiated.

Cropedia addresses these concerns in detail, crop by crop.

Cropedia site also educates its users on the history and taxonomy of each crop. Furthermore, each crop's nutritional information is presented in easy-to-use tables and exceptional health properties are discussed as applicable. Recipes and non-food uses are also provided for each crop to help consumers get the most from their purchases from the farm. Thus, Cropedia helps consumers make informed food decisions and possibly introduces them to new food experiences. These experiences are likely to promote personal health and that of the local and global ecosystem because eating locally grown in-season foods is inherently healthy. Locally grown in-season crops contribute far less greenhouse gases than do their conventionally grown equivalents, this is primarily a consequence of long transport distances that these foods typically travel between production and consumption (Bently, S. & Barker, R. 2005). Cropedia promotes the production and consumption of local in-season foods, thereby indirectly helping to reduce greenhouse gas emissions and reduces carbon emissions. Furthermore, the growing of these local foods helps those directly involved to maintain healthy weights through the physical activity required of them. Simply eating a diet rich in fresh fruits and vegetables is unquestionably health promoting and helps in reducing the risk of obesity. So in terms of personal and environmental health, Cropedia plays a positive role.

Connecting Community, Land and Food Systems

Although many Cropedia users may initially be drawn to the site for tips on eating and growing local foods, some will likely go on to connect with the UBC community in a meaningful way. Thus, Cropedia provides a new interface between the local and global communities and the UBC community. This interface may attract interest from those previously unaware of UBC's role in the local land food system. This could manifest

itself in the form of more shoppers at the UBC farm market, or more students in the faculty of Land Food Systems, or possibly more interest in UBC in general from those seeking a university with environmental and academic integrity. Another way that Cropedia benefits the community at large is through its role as a venue to share research findings made at the UBC farm. Cropedia provides a chance for students to connect what they have learned in school to a real life project. Sharing this knowledge raises awareness among current and potential students that not all learning takes place in the classroom and may help inspire further research at the farm. For DIY growers, these findings may help them overcome challenges unique to growing food in our region and this may lead to increased yields thus enhancing local food security.

Cropedia plays an important role in informing UBC food system players and others about food grown on the UBC campus. This site helps consumers and growers alike by providing locally relevant information in an easy-to-use package. As an interface Cropedia connects the local and global community to the UBC community in a way that highlights UBC's leadership role in the local land food system. As more knowledge and awareness is being circulated into the community, it opens up opportunities for people to make suggestions that could help improve the sustainability of the UBC food system and the local food system.

Challenges

The process of finding recipes used by Agora Café and AgUS was challenging because not all crops have been used by these organizations. So, our group also included recipes that UBC Food Services are using and other online recipes that team members believed to be innovative and good.

In addition, setting meeting times with the interviewees was challenging because of their limited availability and coordinating with the other three groups. This was overcome by individual meeting with the contacts without waiting for the big group and then sharing the information on Vista. The need for extensive coordination between four groups to get all 44 crop pages uniform posed another huge challenge during completion of the project. Collectively we agreed to general protocols to ensure as much consistency as possible given the circumstances.

Recommendations

For Future LFS 450 Students

Structure of the current Cropedia site can still be enhanced in several ways.

Main Cropedia page

First of all, on the main Cropedia site, an introduction that explains the purpose of Cropedia, its goals, and mission statement would help visitors get a sense of what the site is all about. It would also be useful to include a section on appropriate gardening practices and tips on how to make your own compost and fertilizer. An interactive forum for users to post questions would also be an asset and a way of including the community in this project. The list of crops on the site should be reorganized into certain groups; for example fruits, herbs, vegetables, et cetera. Finally, changes must be made to allow

Google and other search engines to find Cropedia, currently something about the architecture of the site does not allow it to be found..

Specific crop page

Within each crop's page, there needs to be an introduction that contains a brief description of the crop itself, its uses, history, and relevance. A more detailed version of the nutritional information that includes additional values for other vitamins and minerals could be of interest and of use. Other really useful resources to consider including for each crop would be: (1) how to store each crop; (2) how its taste or texture should be, and (3) indications that the crop may be going bad, such as potatoes with "eyes" growing on the surface should be discarded. A helpful resource for do-it-yourself (DIY) growers would be to have a separate section outlining tips from the UBC farmers on a specific crop. Another resource to include for do-it-yourself growers would be companion crops for each specific crop; that way they have the option to grow more than one type of crop at a time.

Additional Cropedia pages

An "Upcoming Events" section would also be a good way to raise awareness of local food activities. Telling visitors about the UBC Apple Festival or Seeds Saturdays across BC (for more details regarding this event, please visit website: <http://bcseeds.org/seedy-sats-2010.php>) will be a great idea. Similarly, a "Featured News" section could also provide information to visitors on offers from local producers. For example, letting visitors know that local produce being delivered to their house via bicycle can reduce carbon footprint and allow them to start their small-scale sustainable life (for more details, please visit <http://www.grocergunst.com/>).

Another section for academic connections could also be useful for non-crop-specific research such as crop rotation or fertilizing to be shared. A section that includes other crops that are well suited for growing in our local conditions could also be an interesting way to make suggestions for the UBC Farm and/or the LFSOG to incorporate different crops.

There were a few other options that were considered to make the Cropedia more accessible: (1) creating a craigslist-cropedia hybrid for use outside of UBC, i.e. Cropedia with regional satellite sites, (2) creating a page to describe basic crop necessities common to all crops in the Vancouver area, then just adding crop-specific info for growing, (3) provide in-season availability and prices for crops sold at the UBC farm market and (4) a list of local establishments that currently purchase UBC-grown crops so that consumers have more options in accessing these foods. This could possibly be established in a similar format as *Get Local* at <http://www.getlocalbc.org/en/> and *Eat Local* at <http://www.eatlocal.org/index.html>, or simply link this to source of information to their website.

AMS Food and Beverage Department and UBC Food Services

The food venues on campus that use produce from the UBC Farm and/or LFSOG can be used to promote Cropedia as well. This can be done by including the Cropedia contact information on the signs that indicate the food is from the farm or the garden. Piggybacking on the established players in the UBC Food System can help to popularize the Cropedia site.

Conclusion

LFS Cropedia site is the first online UBC urban agriculture educational resource solely based on UBC grown food for volunteers and consumers of Agora Café, AgUS, Sprouts, the UBC Farm and the LFS Orchard Garden. The 11 crops assigned to our group were successfully incorporated into Cropedia site in standardized form, with information on years grown at UBC Farm and LFS Orchard Garden, specific growing condition and seasonality, nutritional information, recipes, usage inventory and academic connections. This data base provides information on UBC-grown crops, thus enabling users to easily get access to information that was once difficult to obtain. It allows users to make informed food choices and increases involvement in the food they eat. It creates new interface to connect the community to land and food systems, specifically the UBC Farm, at the same time, raises awareness of locally grown food at UBC. The site promotes production and consumption of local in-season foods which ultimately may lead to less green house gases production and less obesity. Following improvements suggested can expand the current Cropedia site structure and would have positive impacts to the site in future years.

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