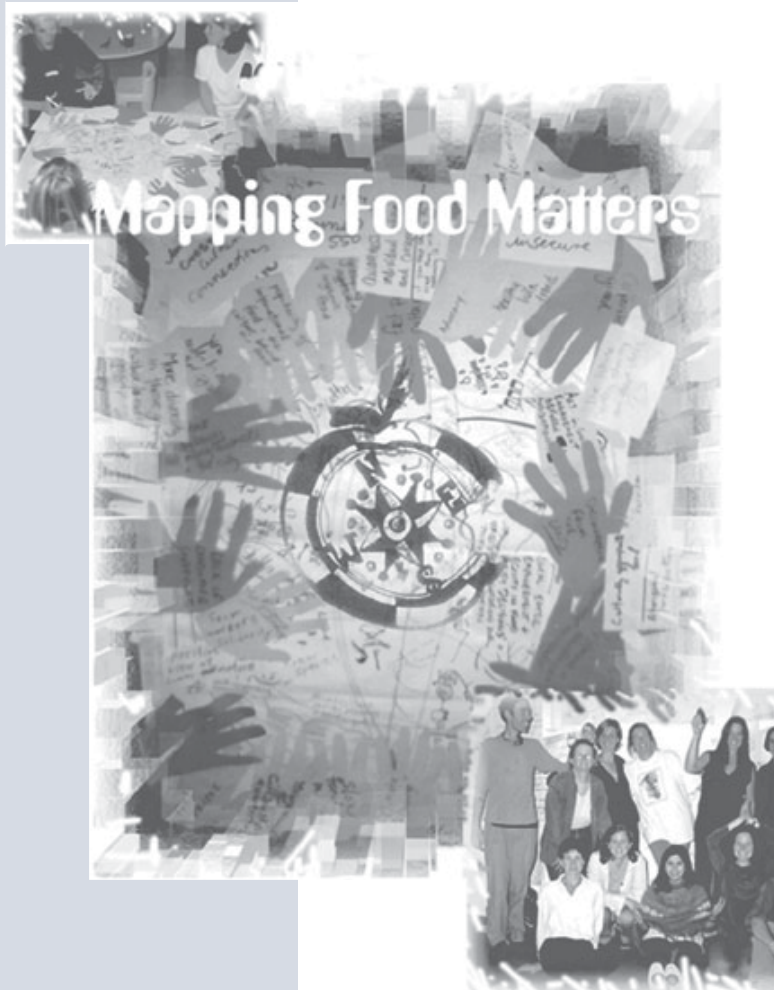


Mapping Food Matters

A Resource on Place Based Food System Mapping



Mapping Food Matters

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A big thanks to the host agencies, GroundWorks, LifeCycles, Common Ground, and Oxfam Canada (see page 2) for their organizational help in the development of this resource.

A Note to Readers

This primary document identifies some of the major topics and themes for using community based mapping as a tool for advocacy, education and action around food. The intention is to develop this further as a learning resource. Your comments and questions are encouraged to help shape this tool.

In respect for intellectual property rights, we request that no duplications of this document be made without consent of the author. Please forward any queries to Silas Rosenblatt at: foodmapping@hotmail.com

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GroundWorks
Learning Centre



Preface – Food as a Global Issue

Around the world we are witnessing rapid changes not only to how food is cultivated, but also to the role it plays in our lives. Once an intrinsic human right shared by all, food has become an object of market speculation and international trade. Food is big money. As the gap between rich and poor continues to grow, so too does the gulf between the nourished and the hungry.

Currently, there are strong global pressures towards increasing the volume of food production – employing large scale, energy-intensive methods that rely on genetically-engineered crops, pesticides and chemical fertilizers – to fill this gap. The underlying assumption behind this movement is that a lack of supply is the root cause of food inequity. However, what is not often questioned is how the present distribution of food and the resources necessary for growing it play a role in the problem.

The assumption behind **Mapping Food Matters** is that there is more than enough abundance to meet our food needs globally if we can identify and creatively utilize the skills, knowledge and resources that already exist. On Southern Vancouver Island we are gifted with huge agricultural capacities, yet in the past fifty years we have gone from being relatively food self-sufficient to being 90% dependent on off-island food imports. It seems prudent for us to rethink our dependence on distant sources of food while so much potential is wasted. This is not an isolated situation in much of the developed world. While imported foods tend to be cheaper in volume, the social and ecological costs of global food production are often deferred to the southern nations or to future generations.

Food system mapping encourages a vision of locally-based food self-reliance. This is not with the intention of withdrawing from the global community. Rather, by growing our abundance at a local level we can encourage and support others to do the same. With full bellies and hearts, we can all participate in creating a culture of peace and plenty locally and globally.



Ground Works Learning Centre

GroundWorks is a Victoria-based public resource centre providing tools and technical support to entrepreneurs in the agri-food sector and to groups and individuals interested in community-based mapping on Southern Vancouver Island.

LifeCycles

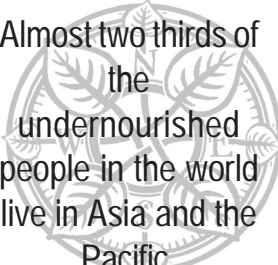
LifeCycles is a non-profit agency committed to the development of a healthy and equitable food system, locally and globally. Since 1994, LifeCycles has worked in partnership with many community groups, schools and agencies to create food gardens, workshops, and youth based agri-food businesses and skills development projects.

Common Ground Community Mapping Project

Common Ground is a Victoria based community mapping project. Common Ground provides information, resources and support for community mapping to schools, neighbourhoods, local government, conservation and community groups who are interested in participatory in community visioning and planning processes. Common Ground is also an umbrella organization to food system mapping projects such as Food for Life (see bibliography) and Eating in Place.

Oxfam Canada – Victoria, B.C.

Oxfam, a non-profit international development organization, was formed in 1963. Oxfam funds and supports programs to help people meet their basic needs and to address the systemic causes of poverty globally. In Victoria, the local Oxfam office—as part of its educational mandate to promote food security locally and globally—is a partner in the Ground Works Learning Centre.



Almost two thirds of the undernourished people in the world live in Asia and the Pacific.

Sponsor Organization Profiles

Overview

Over the course of three days in late September 2000, a group of Oxfam delegates from across Canada gathered in Victoria together with members of LifeCycles and Common Ground to discuss and share learning on community-based mapping within the context of food security education and advocacy. Given the range and depth of experience around food issues in the group, it was an excellent opportunity to clarify some of the theory around community-based mapping and to explore possibilities for using community mapping in our collective work around food and global issues.

There are as many different ways to map as there are inspirations to map. For this reason, rather than leaning on one particular methodology, our efforts focused on identifying common themes. Some of these themes were illustrated with examples (see case studies) of hands-on community mapping projects in which participants were currently engaged in or thinking of initiating to achieve their aims as food educators and activists.

Often one of the most valuable outcomes of community mapping is the dialogue and shift in perspective it generates - a measure of success being the quality of dialogue and questions raised. **Mapping Food Matters** was inspired from the exchange of vision and ideas generated during the three day teach-in. Day one of the event focused on community mapping theory and day two on the applications of mapping. On day three we explored food system and green mapping in a workshop environment.

This resource attempts to speak to a wide audience of food lovers, educators and activists by providing access to some of the ideas and practices of food mapping. Hopefully this small contribution will inspire further explorations into the new territory of mapping, where our needs for healthy food, a sense of place and community are jointly realized.



Some Background Theory

Community Based Mapping

If a picture is worth a thousand words, a map is worth a million. Maps have the unique capacity not only to guide us through the world but also to shape it.

Mapping is a powerful tool for visualizing and communicating information about three-dimensional space. Maps illustrate our basic relationships to the land and sometimes our relationships to other people. However maps are only partial representations of the world. The information that makes it onto a map tends to be highly subjective in nature; there will always be some distortion. The values of the mapmaker often determine what is left off and what is put on the map, as well as how this information is represented in a hierarchy of importance.

Problems can result when a map is confused with a territory, meaning the map is viewed as an objective or whole representation of the land. This situation is often encountered in conventional planning processes. The maps used in these settings tend to be very sophisticated, but frequently do not reflect the diversity of interests or history of the geographic area portrayed. When something is left off the map, particularly in planning, it is in effect written out of existence. The result can be misinformed or inappropriate decisions that set development at odds with the real needs of local people.

The 4 A's of food security

In the context of Mapping Food Matters, food security is defined as:

Access – Access to affordable, high quality food and/or the information, technology, money and land for the production of food.

Adequacy – Food quality meets the nutritional needs for health and happiness.

Acceptability – Access to food that is culturally appropriate.

Advocacy – Ability to participate in decision-making on issues that affect local access to healthy food.

Every place has a story, a particular uniqueness found in the land and ways of being of the people who live there. For example, on southern Vancouver Island we are situated in the rain shadow of the Olympic Mountains, which produces dry, Mediterranean-like summers and mild, wet winters.

Over thousands of years local biotic communities have evolved and adapted to this climate, most notably the Garry Oak meadow ecosystem. In the springtime the Garry Oak meadows come alive with a colourful display of purple wild flowers which, oblivious to the unsuspecting eye, tell an important story about their place. It was these warm, open vistas that first attracted white settlers to southern Vancouver Island over a hundred and fifty years ago and encouraged them to establish a fort, changing forever how local peoples relate to the land.

The dry, picturesque Garry Oak meadows were once managed by local First Nations through selective burning of the underbrush to encourage the growth of purple flowering Camas bulbs (cultivated for trade and as a staple food crop). However, shortly after contact with European



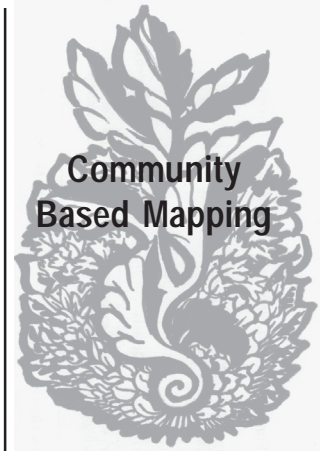
Purple flowering Camas

explorers many of these meadows were fenced off for the grazing of cattle, for farming and for the expansion of colonial settlements. The Lekwungen people (local First Nation) resisted the appropriation of their camas fields by harvesting the settlers' cows.

Today these rare meadows not only form a vital refuge of plant diversity on southern Vancouver Island, but also contain an important link to the past.

Each of our home places is special - with very particular characteristics and needs. Where do children go to play or learn about nature? Where do

animals migrate in the winter? What green space or cultural amenities exist? Where do food and water come from? What kind of public space or events are there where people can socialize for free? Who are the decision-makers and who owns the land? The more we know about home, the more we are able to positively respond to the unique needs and challenges of



"This place itself appears a perfect 'Eden' in the midst of the dreary wilderness of the Northwest coast"

Reflection on the Southern Vancouver Island region by James Douglas, first Governor of the Fort of Vancouver Island, 1843

Place means many things to many people. For First Nations people its significance often goes back for thousands of years and is defined by close relationships with the land or on the coast, the sea. For someone living in downtown Toronto, place may be four square blocks around Spadina Avenue where they shop and socialize. For a child growing up in BC's Fraser Valley it could be the rolling expanse of farmland full of orange



pumpkins in the fall. It is hard to draw a line around place because definitions tend to be experiential rather than theoretical. Often these lines will overlap each other in a geographic area and change over time.

How do you define **place**?

Community based mapping--sometimes known as bioregional or barefoot cartography--is a process of mapmaking that centres on the experience of local people and identifies the social, cultural, economic and ecological assets that contribute to a sense of health and belonging. The maps created using community based mapping not only validate local knowledge, they provide a guiding vision for future planning of local resources. Although mapping has often been the domain of specialists, more and more First Nations, citizen coalitions, conservation groups, health care providers and activists are putting themselves on the map and charting a path of social, ecological, and economic change that nourishes both people and place.

Local Food Systems

Community mapping compels us to look at the world and particularly the problems we face at home in a radically different light. It communicates a vision of a world woven together by a multiplicity of dynamic relationships and events. When shopping for groceries, the consumer is a direct participant in the development of these highly responsive relationships around food.

For example, buying from small-scale local or organic retailers the consumer supports a series of relationships that includes all the hands involved in production and distribution of the food, from the farmer to the check-out clerk. Buying locally does not only employ local people. It helps to keep local agricultural lands producing high quality food, which feeds back to the point of origin (the consumer) in the form of a sense of food security, local economic stability and connection with others sharing the same land and food.

In a healthy food system money and resources are not transported out as soon as a purchase is made. They continue to circulate within the community. In this sense the needs and outputs (products and waste) of the system are in balance. We are forever located in this web of relationships in which our personal choices have tremendous influence on the whole. This also applies when shopping at large, multinational food stores. Who benefits from the purchase? Where does the money go after it is spent? How does this choice feed back to the consumer?

For thousands of years local food systems have fed people with a seemingly inexhaustible abundance. It seems natural that local food systems could again become a basis for food sufficiency and sustainability. However, without a picture of the whole system, it is hard to understand our place in it and how and where we can have a positive influence.

Community mapping is one way to create a snapshot of our food system and to build awareness of the many resources and alternatives that exist locally to provide for food needs. In the process of mapping we can find a great wealth of relationships and resources to draw on for support. The primary challenge is to identify and weave these together back into a dynamic balance for the maximum benefit of the whole; the whole community and the whole food system.



Theoretical Tools



Asset based development

A community development approach that focuses on identifying and utilizing the internal strengths of people, organizations, institutions and physical resources to their fullest potential. Outside resources are used only to augment existing capacity.

See *Building Communities From the Inside Out: A Path Towards Finding and Mobilizing a Community's Assets*, Kretzmann and McKnight.



Possible Applications of Mapping in Food Security Work

On Day 2 of **Mapping Food Matters**, after reflecting on ideas and concepts shared, we had the opportunity to explore in small groups some applications of food mapping as a tool for education, advocacy, policy and planning. Included here are ideas from these discussions. In addition, you will find descriptions of two existing examples of food-based mapping included under case studies.

Community mapping is a dynamic tool for collecting and sharing information about food and the people who grow, sell and eat it. Mapping can be applied in specific situations or projects, such as understanding the needs of a client group (i.e. consumers or local farmers), or teaching school children about food issues. It can also be used to create a panoramic picture of the whole food system, illustrated through successive thematic layers of information.

Education for Action

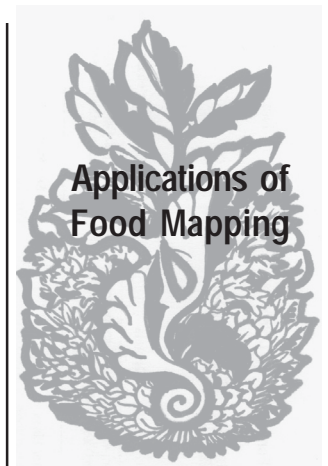
In a classroom setting, maps can inspire in students a whole new relationship to food and to place. The power of maps lies in their capacity to invite the curiosity of young people. Maps make an ideal tool for teaching about where we live and the food we eat; they can illustrate not only our special relationship to the land but also the quality of that relationship over time. For example, a map showing development patterns on agricultural land in snapshots of one hundred years ago, fifty years ago and the present day would communicate a more telling message than a document describing the same process of change.

Maps can also depict the process and patterns of food production that normally lie hidden from our everyday awareness. Food production has, for many people, become abstracted, bearing little relationship to the seasons or to the climate and productive capacities of where we live. Most food sold in grocery stores is grown an average 1,700 miles away and passes through many hands before it reaches us. Using world maps, a global perspective on food can be introduced by tracing the distance and pathways food commonly travels to get to our dinner table.

One of the primary goals of using maps in a pedagogical context is to raise more questions than the map answers. Because maps are often taken to be unbiased and accurate portraits of the world, it is important to encourage young people to critically ask: Who created this map? What story does it tell about this place? What is missing from the map?

Baseline Information for Policy and Planning

Food system mapping starts with an inventory of food resources or assets currently existing at a community or regional level. These food assets could be the neighborhood brick oven baker, community kitchens, fresh fish outlets, allotment gardens or funky restaurants downtown that regularly prepare fresh local produce. Some groups in B.C. have mapped local growers; others have identified supportive not-for-profit and government agencies. When collected in a standardized way, information can become accessible to a wider range of people to raise awareness or to initiate action around local food issues. In the same way that conservation or ecological groups use mapping to inventory endangered plant communities, mapping can also be used to create indicators of local food security. Once a map is created, it is already out of date—it is like taking a quick snapshot of a place. Despite being dated, this picture or map acts as a benchmark in time. This benchmark could also be called a baseline from which we can measure the impact of change in the region. In terms of utilizing baseline information in



Applications of
Food Mapping



Theoretical Tools

Participatory Education

A pedagogical model, which employs a facilitation approach to leadership and learning. Rather than teaching, the facilitator creates an environment where people can critically reflect on the sources of problems faced and mobilize group wisdom and resources as the catalyst for action.

See *Pedagogy of the Oppressed*,
Paulo Freire

Baseline Information for Policy and Planning cont.

mapping, thematic layers can be created which can be overlaid on each other to show the numerous aspects of food production, distribution and consumption over time.

For example, a map created in 1999 showing the number of productive farms in a defined locale would, in contrast to a similar map created five years down the road, provide some indication of the state of agriculture in the region. Do we have more or fewer farms growing food for local consumption?

Sustainable Food Systems by Design

Like eco-systems, food systems (or food-sheds) are complex and unique from region to region. If our goal is local food self sufficiency it is important to understand how our food system is unique and what are some of the patterns or influences acting on the system. Inventorying local food assets can provide a greater understanding of the needs and products of each resource or element in the system. Based on this information we can nurture and create healthy connections between resources and people to maximize their potential and the abundance of the whole system. This is like any design process; having a basic idea of the materials we are working with, we can design a system that works and makes sense in our context. A food roundtable of community stakeholders (consumers, retailers, producers, and supportive agencies) is perhaps the best organizational structure for facilitating a food system design.

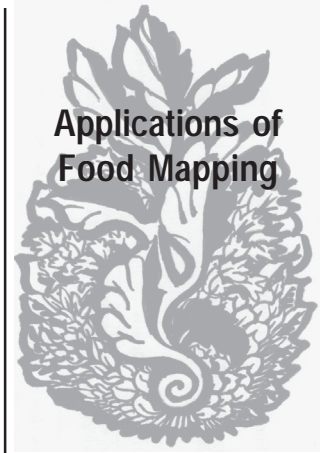
The process of mapping and planning sometimes requires us to think creatively about the multiple ways resources could be used. For example, churches, businesses and community centres may often have under-utilized commercial kitchens, food processing units or storage space that no one knows about until they are put on a map or otherwise made known to the community. Once identified, these assets can be opened up to all kinds of use by catering co-ops, young entrepreneurs or community nutritionists, creating many new supportive relationships.

Mapping and Community Development: Process as Product

Everyone is an expert about where they live and everyone can map. Perhaps the greatest outcome of community-based mapping is the dialogue and renewed interest in home—or for that matter, food—that it generates.

Throughout much of the world, the richness of human and ecological communities has largely been diverted into a homogenous economic order which equates unlimited economic growth with well-being. The effects of globalization are increasingly being felt at home in the form of environmental degradation, poverty and a growing sense of alienation. The process of community based mapping attempts, through open dialogue, art, stories and shared history, to re-inspire the values and experiences that are at the heart of personal health and community.

Applications of Food Mapping



Theoretical Tools



Permaculture Design

Permaculture is a set of design principles and practical techniques for understanding the multiple functions and needs of all key elements (people and place) in a system and consciously integrating these functions and needs into a network of harmonious relationships. In a permaculture context all aspects of human development model the adaptability, efficiency, and resilience of natural systems and biotic communities.

See, *An Introduction to Permaculture, Mollison*



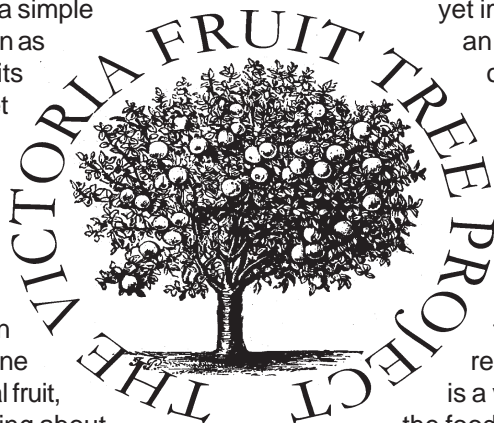
Case Studies

Tasting the Fruits of Mapping in Victoria

The Victoria Fruit Tree Project

No one knows exactly how many fruit trees there are in Victoria, but the Victoria Fruit Tree Project is trying to map and pick as many of them as possible. The Fruit Tree Project got its start in 1998, with a goal of harvesting and redistributing the huge quantities of wasted fruit rotting in backyards throughout the Victoria area in the fall.

The Fruit Tree Map is a simple Tree Project. What began as a mapping project of its a laminated scale street Victoria showing ind-house numbers. Under TER YOUR FRUIT to use pins to mark the street. Different different types of are the most popular in pins on the map, each one 150 pounds of fresh local fruit, way to get people thinking about — without using scary jargon like “food



yet important part of the Fruit an outreach tool has become own. The Fruit Tree Map is address map of the City of vidual lots with their the invitation to “REGIS-TREE”, people are asked fruit trees on their lots or coloured pins indicate trees—apples and plums this city. The hundreds of representing an average of is a very simple yet effective the food literally in their backyards security” or “urban food production”.

The Fruit Tree Map is a familiar display at community markets and events. Fruit Tree Project staff or volunteers help people locate their trees on the map and provide information about the project. Not only does the map provide an interactive way to publicize the project, but it is also a visual registry of the fruit trees in the city. Every few months a lucky person has the job of entering all of the newly mapped addresses and trees in a computer database.

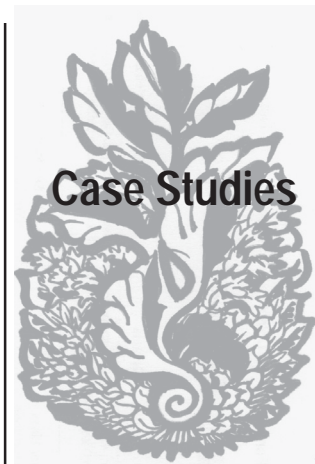
The project is working toward a complete registry of all the fruit trees in the city that are available for picking. If you can't use all the fruit on your own fruit trees, you can contact the Fruit Tree Project and register your tree; teams of volunteers will pick the fruit, sharing some with you. The collected fruit is distributed to volunteers, individuals in need and events needing fresh fruit. Volunteers also juice a quantity of the picked fruit and sell it to raise funds. Three years and almost 16,000 pounds of fruit later, the Victoria Fruit Tree Project is still growing.

For more information on the Victoria Fruit Tree Project, contact LifeCycles at (250) 383 5800 or e-mail: lifecycles@coastnet.com

Mapping the Revolution: A Report on Food Mapping in Cuba

A big question for many of us concerned with food security issues on Vancouver Island is what would happen if we were cut off from the global food chain. How would we survive when today only 10% of our food is produced locally. In Cuba this question was answered with a massive food crisis and extreme rationing upon the collapse of the Soviet Union.

During a recent work term in Havana, I had the opportunity to sit among a group of thirty-something Cubans and listen to first-hand accounts of people never having enough to eat, the difficulty of getting from one place to the next with no personal energy and no public transportation. When the USSR collapsed in 1989, it marked the beginning of a transition in Cuba from high input/import industrial state-run agriculture to low input, less centralized, near-organic rural and urban production. With the Soviet Union went 85% of Cuba's trade, including agricultural equipment, pesticides, fertilizers, and fuel for transportation, thus requiring a major transformation of agricultural production in the country. Urban agriculture quickly became a vital part of the urban food chain. Twelve years later the movement for sustainability continues.



What is a local food system anyway?

Food for Life food system mapping project defined it as a network of direct relationships between the land, producers, distributors, consumers, and supporting agencies (like not for profit organizations, businesses, institutions and branches of local government).

Mapping and Urban Agriculture

Mapping has many applications for conducting research and mobilizing people around food. The Antonio Nuñez Jimenez Foundation for Nature and Humanity is looking at mapping to identify new spaces for growing food and for understanding who is growing what and where. The Foundation is part of a Havana-wide Green Mapping network. Green Mapping is a global initiative to identify ecologically significant areas in urban spaces using a standardized set of icons. Roberto Sánchez, a coordinator of the Foundation's Urban Agriculture Program commented in a recent green map workshop, "I'm not so interested in a Green Map with all kinds of symbols. That seems more like a tourist map. I would like us to create a map that focuses more on urban agriculture." The Felix Varela Centre, the National Centre of Community Culture, and the Institute of Ecology and Systematics have been organizing workshops with young people in schools and neighborhoods to design their own unique green mapping icons and to create maps of their communities, highlighting the things that are important to them, of which food is a strong feature.

Mapping of local food resources has been adapted as a more formal planning tool by NGOs and local government. The Cuban Association of Agriculture and Forestry Technicians has used mapping to identify the farms and gardens in Havana. Using a planning map as a base, municipal extension workers who work with the urban farmers, located the farms in their areas with different colored stickers identifying the type of farm, such as co-operatives, organopónicos (high yield organic gardens) or self-sufficiency gardens. The Ministry of Agriculture's Department of Urban Agriculture uses mapping to identify where the food needs are concentrated as compared to the land base for food production. This helps them to set policy for what types of food should be grown where. One of their maps identifies different zones in the city. With the zones closer to the Havana core, they aim to grow food that is difficult to transport, such as lettuce. In the zones on the periphery they plan to grow more storable foods, such as potatoes and squash.

In Cuba, mapping is seen as a way to identify food resources and to support networks of people and organizations with diverse perspectives and needs around food. Green mapping in particular is helping to increase people's awareness of the urban ecology in Havana through environmental education (which includes agriculture) and by planning processes that place economic and social development in the context of restoring the local environment.

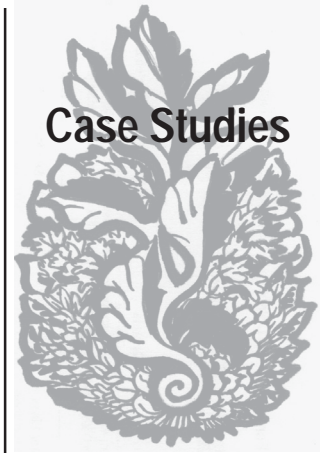
Sol Kinnis has worked with Common Ground and Life Cycles in Victoria, BC. She spent three months in Havana working with the Antonio Nuñez Jiménez Foundation for Nature and Humanity. As part of a CIDA internship program she helped to put together the framework for data collection on backyard and small lot gardening in inner-city Havana.

Conclusion

Food makes an ideal community development tool for its ability to bridge differences between people. We all eat, so there is tremendous ground for relating not only with each other but also with the local plants, the waterways and the fertile lands that support life. In this regard when we choose to eat local foods our connection to place is not some abstract experience, but is straight forward and real. Community mapping weaves the diverse resources and relationships of where we live into a colorful and dynamic picture of the whole.

Perhaps the greatest challenge we face in creating positive change at home is moving beyond a way of being in the world that affirms a sense of scarcity and alienation. The process of community mapping and food system mapping can be like seeing with new eyes: seeing abundant possibilities and boundless frontiers of relationships to explore and mobilize.

Case Studies



The real voyage of
discovery
consists not in seeking
new
landscapes but in
having new eyes
-
Marcel Proust

Starting the Mapping Process

There are many approaches to mapping, ranging from hand-drawn maps to computer assisted mapping. Each approach has its own merit when used skillfully. For the purpose of community development, at the beginning it is best to keep things simple, low-tech and creative. Starting points for a community mapping process might be a workshop on mapping, a public event on local history or a gallery showing of local art and maps. Listed below are some guidelines which can be adapted depending on your purpose and group.

1) Start with the people. For a truly meaningful and reflective map, people who have a stake in the map should be invited to participate from the beginning. Decide on your purpose for mapping by asking a few broad questions, i.e. What is the current level of food security in this locale? What are the economic development opportunities in this area? Where is there an overlap of green space and agricultural land?

Clarify your intentions for how the finished map will be used. Is it to encourage people to buy local foods? Is it to influence land use planning? Your intention will determine the overall look and presentation of the map.

2) Decide on a geographic region and sketch this area in the form of a mental map. A mental map is a hand-drawn map created from memory. This step can be as creative as you decide to make it.

3) Decide what information you would like to put on a map using the primary questions mentioned above as a guide. Break the subject material into clear themes, i.e. organic farms, food banks, toxic soils, food co-ops, etc.

4) Choose a mapping technique. How do you want to document your region? You can use collage, drawings or narratives. You can also create a base map by tracing the buildings, roads, rivers, coastlines and other strong, recognizable landmarks onto tracing paper.

A base map complete with a compass and scale can be photocopied and used to create standardized overlays of information. Using this method, you can develop a thematic atlas of your area. Some people may want to transfer information onto a Geographic Information System (GIS), a computer-based mapping tool. This can be helpful for translating community knowledge into the language of planning and politics.

5) Conduct your research. This can be done through focus groups, school projects or university directed studies. Questionnaires, interviews, archival and web research, photo documentation and workshops can be rich sources of information. Be sure to set clear parameters for your research, otherwise too much information can easily take you away from your original purpose.

6) Transfer the research onto a map using the predetermined themes. Make or use icons to represent information on the map. Written information or pictures can be included on the periphery of the map.

7) Copy and use your map. The finished maps may be bound into an atlas or posted on the web. If the maps are colorful and attractive you could distribute them through local stores, brown box programs or community events. There are many uses for the maps created, some have been described already in the above applications, like identifying underutilized food resources, lobbying policy makers or showing the process of change in the region over time.

8) Reflect on and revise your map. Once the map or maps are finished they are already dated. Community mapping is a cyclical process of action and reflection. As people see the finished product, they will have questions and bring forward criticisms which will influence future revisions of the maps.

For a more detailed explanation of the community based mapping process, see ***Giving the Land a Voice, The Land Trust Alliance of B.C.***



"Basically, all you really need to start mapping is a keen, obsessive, slightly eccentric interest in a place."

Briony Penn, from Ways we live, exploring community

Workshop Outlines

The following workshop outlines can be applied in a number of diverse settings as both a research tool to gather detailed information for future maps or to create a learning experience for youth and adults around food and place.

Food System Mapping Workshop

This workshop is intended to give people a brief experience of reflecting on and mapping community food assets. If the aim is to create a specific map, it is recommended that you change the questions, content and icons to reflect your aim. For example, you could ask people to reflect specifically on farmers' markets in their inventory of food assets and create icons that reflect this theme. Adapt the content to your learning needs and research objectives.

Introductions (10 min)

In a large group open the workshop with welcomes and a few questions:

**Who are you?*

**What food do you love best?*

**Do you have any previous experience with food system/community mapping?*

Facilitator's Notes

Before we can understand what food system mapping is we need to examine our assumptions of what a food system is (including what defines a sustainable system) and what is unique about a community-based map. The following game offers an opportunity to explore these definitions. Be sure to have fun prizes available – like food or this resource.

What is a Food System? – Eating in Place Bingo (15 min)

Rationale: To identify group knowledge and definitions of a food system

Hand out pens and bingo cards with questions related to local and global food production. Again adapt the bingo card to your region. You might wish to make your own cards.

Rules

*People can't answer questions themselves

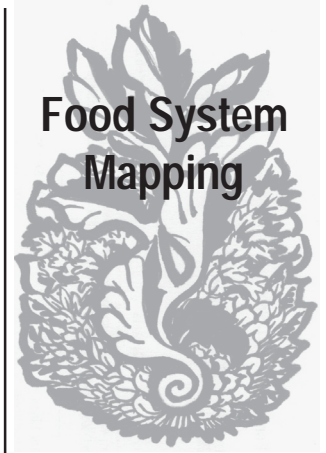
*Participants circulate around the room asking each other the questions on the card

*You can only ask one person a maximum of two questions.

*If the person knows the answer get them to sign their name on the appropriate square.

When someone gets "Bingo," go through each answer with the group to see if they are correct. If there is a wrong answer, keep playing. Play at least a couple of rounds until all the questions are answered.

Food System Mapping



Workshop Materials

Lots of coloured pens
Large rolls of newsprint or flipchart paper
Glue and masking tape
100–200 cut-out hands—half in one color; half in another colour
Sticker icons of tools resources, people and place (see right margin of page 13)
Bingo cards, one per participant (located at the end of this workshop outline page 14)
Bingo prizes
One large map of your region or 3–4 small maps of your region for break-out groups
Copies of this workshop outline for co-facilitators
Looseleaf paper
Name tags
3–4 large simple hand drawn baskets on newsprint or flipchart paper – leave some blank space around the edges
Wild Cards (see next page)



Questions for the Small Group Discussion (10-15 min)

Have a recorder for each group and choose a representative to report back to the large group.

Ask the following questions:

**What delineates a food system as being local and global? What are some distinguishing traits?*

**What defines a healthy sustainable food system? how could we tell if it was healthy?*

**Can we have a sustainable global food system?*

Report Summarized Points to Large Group (10 min)

One representative from each group reports back to the whole group.

Putting Food on the Map (15 –20 minutes)

Rationale: To share knowledge about valued resources providing for local food needs.

Facilitators' note

If you have a group number larger than 10 people, you will need the help of co-facilitators. Ask experienced members in the workshop to assist you by facilitating the small groups using the instructions laid out in this guide. Participants are sometimes reluctant to use art or they may need gentle prompting to share their knowledge.

Divide the large group into three or four smaller groups: (1) Consumers (eaters, food lovers), (2) Distributors (food retailers and wholesalers), (3) Producers (farmers, secondary industry and cottage industry) and (4) Supporting agencies (NGOs, community groups and government) or different locales. Sometimes it is fun to split the group up into men and women to show the different gender-based perspectives.

Start with a round of names and where people are from (work or geographically) You might ask an opening question:

**What do you value or cherish about our local food system?*

Ask the group to define the geographic area in question — local, regional or bioregional. How is it delineated? Is it by political or geophysical boundaries?

Draw participants' attention to the food basket in the middle of the page. This basket is a symbolic representation of our food system. Brainstorm all the ingredients in this basket.

Ask another question:

**What are some of the key tools, resources, people and places that make this food system healthy and sustainable? – the more specific the better.*

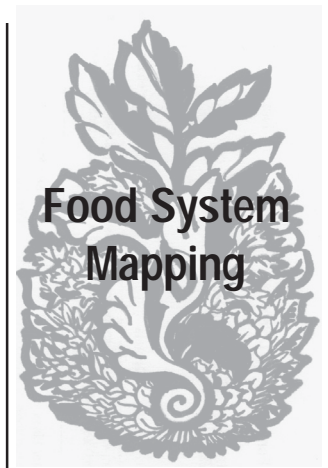
Some people may need prompting. The facilitator can take the lead by drawing a symbol in the basket and naming it. Try to use symbols (remember, we are all artists) because symbols open us up to a greater range of associations. Encourage others to follow your example and draw an asset in the basket and name it — get specific: names, phone numbers, email addresses can be included.

Wild Cards

Rationale: To encourage thinking outside the box. Use sparingly if the group is already generating lots of ideas.

Facilitator's Note

As the groups are brainstorming and filling the food basket the main facilitator walks around distributing 'Wild Cards' — one or two per group, every five minutes. These cards include subject matters like feelings, critical issues, elements, and resources. The group should reflect on these wild cards and include them in their food baskets and maps.



Some Wild Card suggestions

Community kitchens
Friendly banker
Supportive politician
Places of transformation
Missed opportunity
Youth
Free food
Diversity
Places of innovation
Love
Mentor
Home based business
Food co-ops
Sharing



Make the Links (5 -10min)

Rationale: To think creatively about connections between people and resources, particularly cross-sectoral partnerships.

If there are any clear associations, commonalities or possible partnerships between any assets or links in the food basket, draw a line connecting them.

Name External Forces (10 – 15 minutes)

Rationale: To examine some of the external, often hidden or distant, forces that influence our access to food.

Ask the question:

**What outside influences (outside the region) are adding to the abundance of the basket?*

Using the yellow cut-out hands provided ask people to name the positive influence – business, trend, project, people, etc., mark it on the hand and tape it to the outside of the basket.

Ask another question:

**What external influences are taking away from the abundance of our food basket?*

Use the other colored hand to indicate the negative forces (same as above).

Paste the hands to the outside of the basket.

Locating Local Assets (15min)

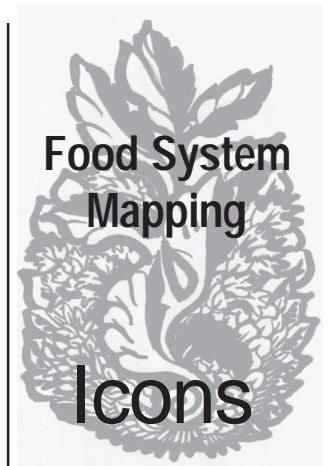
Rationale: To show participants the value of standardizing information

Facilitator's note

For this part of the workshop you will need to have prepared a large number of small icons on sticky paper--for tools, resources, people and place (see right margin). Each small group should have a small pile of these stickers to put on the map. If time is short you may hand draw simple symbols on the map instead of using premade icons.

Ask the group to sort the contents of the basket into tools, resources, people and place. For clarity, mark each asset using different coloured markers for tools, resources, people, and place.

Next, locate the assets spatially on the map of the region provided using one of the three icons provided – tools, resources, people, and place. (Use one map for all the groups or individual map depending on the time). **Don't forget to name the icon on the map!** – i.e. tool – Bob's tractor (encourage details, right down to email addresses and other contact info).



Tools –hard assets and building blocks – ie. physical structures, money, gravel, food processing units soil, rototillers, trucks etc...



Resources – Information sources – mentors, organic farms, friendly businesses, community projects or organizations, helpful institutions, internet sites, etc...



People – Mentors and champions in the local food system –farmers, teachers bankers, business and community folk.



Place – Land resources, special home or spiritual places.

Visioning Our Future Food System: 5 years down the road (10 -15min)

Rationale: To encourage forward looking and establishing collective goals for partnership

Ask the questions:

**What is missing from the food basket?*

**What tools, resources, people or place would you like to develop in our food system in the next five years to make it healthier?*

On a separate piece of paper, draw a symbol for the thing you feel is currently missing from the food basket and label it. Be as specific as possible.

Paste symbols to the large map of the region. Draw at least two connections from symbols to related tools, resources, people and place on the map.

Break (5 -10 min)

Large Group Debrief (20 - 30 minutes)

Rationale: To reflect on the experience of the workshop and provide a sense of closure

Ask participants to elect a spokesperson to present their work

Ask the following questions in succession and have someone record feedback on newsprint:

**What happened?*

**Was it hard or easy to reflect on our food assets this way?*

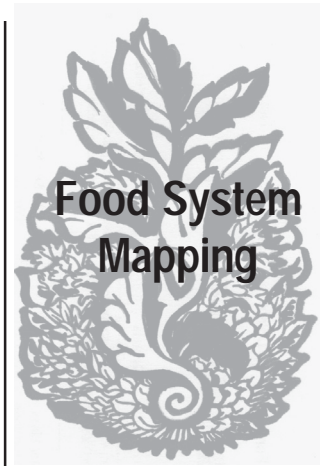
**Did you discover something new about your food system?*

**Based on this experience, how can food system mapping help us in our work?*

**How can we use the information collected and the process?*

Congratulate folks for their efforts. Invite any last comments or reflections and then close the workshop with a circle—with each person sharing what they learned in the workshop.

Hand out evaluation sheets. These are very helpful for feedback--what worked and what didn't? Evaluations will give you ideas to help you improve the workshop the next time



Eating in Place Bingo	IS IT TRUE THAT THE AVERAGE AGE OF A FARMER IN CANADA IS 65	WHAT IS QUINOA	WHERE DOES HUMAN WASTE GO	WHAT IS MONSANTO	WHAT WAS THE GREEN REVOLUTION
	HOW MANY BILLION TONS OF TOP SOIL ARE LOST ANNUALLY IN THE WORLD	WHO IS THE LARGEST SEED COMPANY IN THE WORLD	HOW MANY PEOPLE CURRENTLY LIVE ON THE PLANET	WHAT PERCENTAGE OF FOOD IS IMPORTED INTO THE PROVINCE ANNUALLY	WHERE DOES DRINKING WATER COME FROM
	WHAT PERCENTAGE OF FOOD IS PRODUCED LOCALLY	WHAT IS BACK BACON	Free	HOW LONG IS THE GROWING SEASON	WHAT PERCENTAGE OF GLOBAL ENERGY CONSUMPTION IS USED IN TRANSPORTING FOOD
	HOW MANY VARIETIES OF APPLES ARE SOLD IN THE GROCERY STORE	NAME THREE LOCAL INDIGENOUS FOOD SOURCES	HOW MUCH OF THE WORLD'S LAND MASS IS AVAILABLE FOR FOOD PRODUCTION	WHERE DOES COFFEE SOLD IN CANADA COME FROM	WHAT IS A "GMO"
	WHEN IS ASPARAGUS IN SEASON	HOW FAR DOES FOOD TRAVEL ON AVERAGE BEFORE IT GETS TO YOUR TABLE	NAME THREE OVER WINTERING VEGETABLES GROWN LOCALLY	WHAT IS THE NUMBER ONE TOP TRADED FOOD COMMODITY IN THE WORLD	WHEN IS THE LAST FROST

Food System Bingo Template

Food Mapping with Kids (ages 8 and up)

Facilitators' Notes

This workshop outline is written in a general format for young people, allowing you to insert your own purpose in the body of the learning event. Prior to the workshop, be clear about the learning objectives. Define your focus—is it to teach about nutrition, global issues around food, or urban agriculture? The purpose could be reflected in handouts, overhead projections, slides, maps and other learning aids.

Workshop Opening

Short Intro (10 min)

Begin with a brief circle of introductions including your name and your favorite food.

Longer Intro (20 min)

If time allows, break kids up into pairs.

Partners ask each other:

**What is your name?*

**What is your favourite food and why?*

**What do you consider healthy food or eating and why?*

Participants should record responses so they can be shared in the large group.

Bring kids back to the large group and ask them to introduce their partners using the information collected.

Ask someone to record the responses on flip chart paper in two general categories—favourite foods and healthy food.

Once the round of introductions is complete, encourage the group to try to search for common themes in the responses, drawing attention to obvious differences.

Where Does Your Food Come From?

2 workshop options (20 – 30min)

Rationale: To explore some of the issues concerning how and where our food is produced and sold.

Food System Bingo

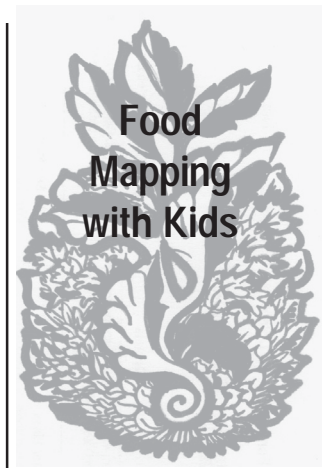
Hand out pens and bingo cards with questions related to local and global food production (see previous exercise). Play bingo!

Debrief Questions (15-20 min)

**What happened – was this hard or easy?*

**What would you consider a top global issue around food these days and why?*

(Insert questions to reflect your content)



Workshop Materials

Lots of coloured pens
Large rolls of newsprint or flipchart paper
Glue and masking tape
Bingo cards, one per participant
Bingo prizes
One large map of the world and of your region for break-out groups
Copies of this workshop outline for co-facilitators
Looseleaf paper
Name tags

Facilitator's Notes

At this point you might want to introduce your purpose and topic in more detail using your learning aids, while referring back to what has already been shared. For example, if your aim is to teach about global food trade you may wish at this point to show a video and relate its content back to the bingo game.

Option 2 - Mapping Food Matters (30 min)

Facilitator's Notes

Come prepared with a handout on facts about local and global food production and distribution to answer some of the missing information.

Divide the large group up into small groups of four or five people.

In small groups ask participants to:

**Talk about what they had for their last meal - does this meal represent what they usually eat*

**Choose one meal from the group to look at in detail*

Using the handouts, markers and flip chart paper, have each group :

**Start with a drawing of the meal in the middle of the page – use lots of color!*

**Break the meal down into its base ingredients and draw lines from the ingredients to the meal.*

Beginning with the base ingredients, try to name all the places and people involved in the process of getting the food source into the meal. With a connecting line trace the steps out from the base ingredient, i.e. Wonder Bread toast — bought at Safeway — baked in New York — made with flour milled in Alabama — from wheat grown in Manitoba.

Give each group a map of the world and ask them to:

**Indicate their home on the map.*

**Trace the steps taken by three base ingredients to get to the meal, using a different colored pen for each ingredient. Clearly label the steps.*

**Measure and calculate the average distance traveled by the food, using the scale provided on the map.*

**Sign the maps & post them on the wall.*

Facilitator's Notes

Now is a good time to insert specific information related to your focus – either about local or global food issues. This may be reflected in a video, overhead projection, slideshow or selected reading which the kids will discuss in a subsequent class.

Ask participants to review the maps

Debrief questions (15-20 min)

Ask the following questions

**Was it easy or hard to trace the path food travels to get to your table?*

**What did you learn about food and where it comes from?*

**What choices are available to you if you want to eat local and healthy food?*

Close the workshop and hand out evaluation sheets.



A Simple Mapping Exercise - Mapping Our Home Places

Introductions (10 min)

Have a quick round of names. Ask people to recall their favorite natural or urban place. What makes it special?.

Mental Mapping (30 min)

Rationale – To explore different perspectives and experiences of place.

Invite each person to take pens, magazines, glue, scissors and paper, as they wish.

Ask people to decide on what they consider to be their local region and to draw a rough outline of it. This can be anything from a city block to a bioregion or larger. After the outline is done have people fill in the following details

*Favorite places – parks, sports centres, churches, cafes etc.

*Least favorite places – uninviting, dangerous or distant.

Or use the categories of life giving and life draining.

Don't be concerned about proper scale. Use lots of color!
Give the map a title, a compass and a key if necessary.

Debrief (25 min)

Ask people to present their maps, answering the following questions:

**What do you consider to be local and why?*

**What did you leave off your map?*

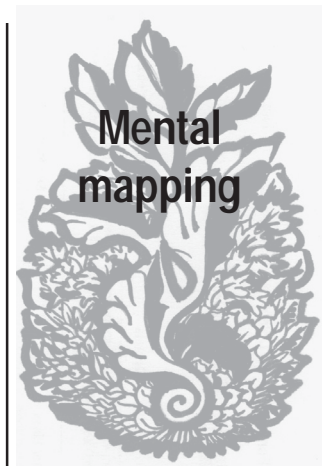
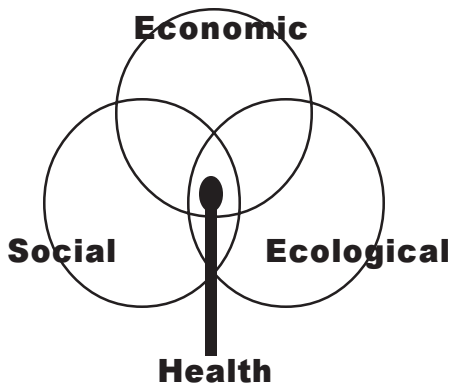
**What does your title say about this place?*

Facilitator's Notes

Look for patterns in the debrief--particularly between men and women or obvious age groups. Often the difference in world-view can be surprising. Make your observations known.

To deepen the dialogue ask participants to name the essential features of a healthy community. Get them to write their answers down on card stock and place them on the wall on a large drawing of concentric circles including ecological, social and economic assets. Ask participants to verbally summarize their points one at a time.

Close the workshop and hand out evaluation sheets.



Life Giving - Places that are harmonious, beautiful, nurturing, friendly and supportive.

Life Draining - Places that are dangerous, sources of conflict, unfriendly or degraded.



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Websites

www.greenmap.org – **Green Map System** – examples of Green Mapping efforts in 115 countries

www.nativemaps.org – **Aboriginal Mapping Network** – examples of mapping in over 100 indigenous communities

www.ffcf.bc.ca **FarmFolk/CityFolk** – urban and rural food security, great links.

www.gatewest.net/~green/ -**From the Ground Up.** Lessons for teachers on agriculture and sustainable development.

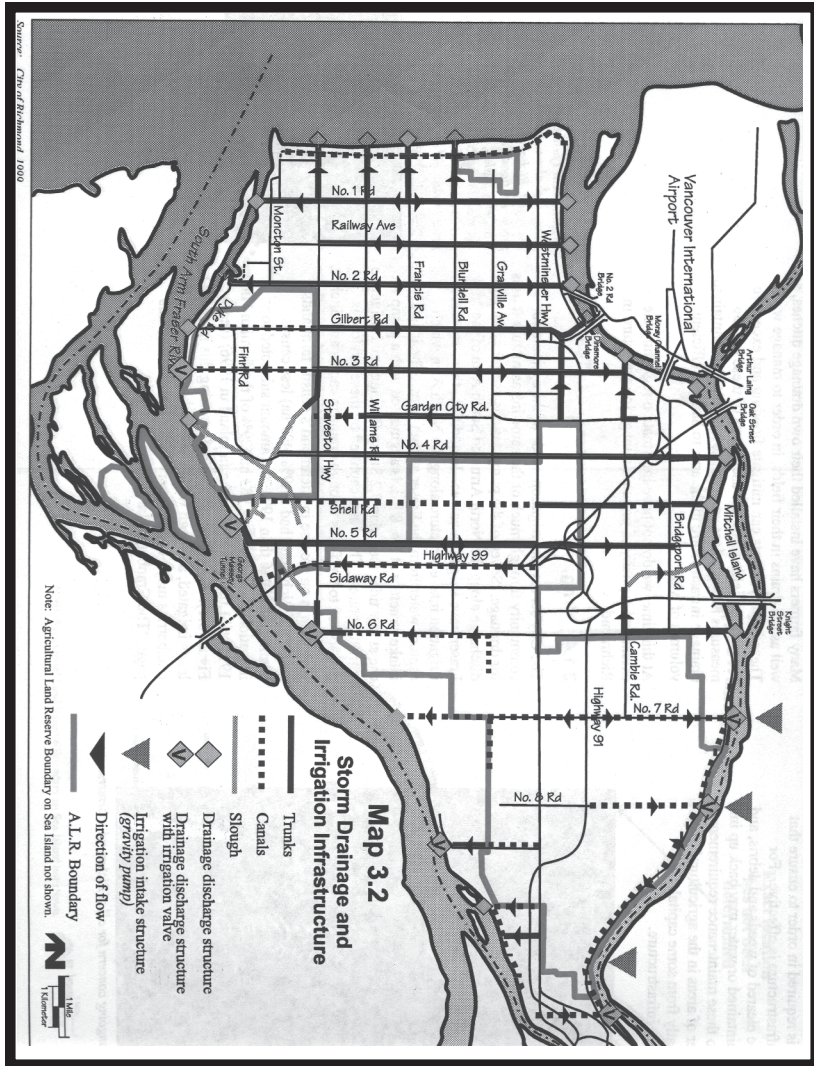
www.cfaitc.org –**The California Foundation for Agriculture in the Classroom** – A large selection of teaching materials on food.

www.commonground.org.uk – **Common Ground UK** - Parish mapping and other local restoration projects.

www.foodsecuritynews.com - **FSNet Web magazine** - Food security information and more.

www3.telus.net/cground - **Common Ground Community Mapping Project** - Information and great links to other community mapping projects





Richmond Agricultural Profile Map

The City of Richmond Agricultural Profile provides a broad and in-depth information baseline in support of the Richmond Agricultural Viability Strategy, of which this map is a feature. The intention of this strategy is to support existing agricultural operations and enhance the amount of actual farming in the Agricultural Land Reserve.

