



Common Ground Community Mapping Project Green Map System

### Mapping our Common Ground a community and green mapping resource guide

Maeve Lydon



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Maeve Lydon

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### introduction + table of contents j

### introduction

#### This booklet is a guide to community

and Green Mapping based primarily on the experiences of the Common Ground Community Mapping project in Canada and the worldwide Green Map System, particularly the Mapas Verdes Network. These groups are frequently asked by community groups for project support; the booklet will hopefully address that need and complement web-based information available. A Spanish version is also available with Portuguese to follow in late 2007 and possibly other languages in the future.

Mapping our Common Ground is also intended to inspire and support "localization for sustainability", the worldwide movement by citizens and communities to engage with and represent the vital interconnections between the human, natural and built environment. Educators, community developers, planners and community activists alike have tested the mapping exercises and applied them to real-life: from making an inventory of the personal gifts of youth in Victoria, Canada, to engaging seniors and youth in neighborhood regeneration in Havana, Cuba, to converting vacant lots into community gardens in New York City, to identifying habitat for endangered species in Victoria Falls, Zimbabwe. The core message of this booklet is: We can all be mapmakers and we can all use mapping to create positive energy and action for our communities and the environment!

Think Global, Map Local! Visit our websites for more information and to offer your own stories.

#### www.commongroundproject.ca

www.greenmap.org



Green Cities by Beth Ferguson & Juan Martinez

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A base map for the Victoria West Community Green Map, Canada

by Jane Baigent

# **Mapping Our Common Ground**

Community mapping is a graphic learning, development, and planning tool that connects people to one another and their home places. We are all mapmakers and any community can make maps. Community maps are the collective representations of geography and landscape, and community mapping is the process to create such representations. Community mapping also tells the stories of what is happening right now and what may happen in the future. Every community has stories, recently or long buried in the lives and landscapes of our common ground. Community mapping connects geography to the history of our lives and the world around us.

### Why Maps?

Maps are graphic representations of our inner and outer worlds. Early humans developed mental maps as they developed language and spatial consciousness. In both oral and written traditions they named symbols, place names, individuals, and actions. To this day, maps maintain both cultural and practical applications. They are powerful navigational tools and can help guide our way in the world and in our daily lives. However, the map is only a picture in time and can never truly re-present the territory. The question is: Who makes the maps? Community mapping, as "spatial discourse", invites ordinary people to express their inner mental maps, their own visions, and values and to connect these to their everyday lives.

### What is a community?

Communities can be places or spaces defined by where and with whom one identifies with and/or feels that one belongs. A community can be geographic (e.g. local, school, neighborhood, regional, national), socio-cultural (e.g. ethnic, women, men, gay, youth and children), sectoral (e.g. education, recreation, government, police, health), ecological (e.g. bioregional, plant, animal, biosphere) or special interest (e.g. church, punk, soccer, birdwatchers).

### What is a map?

"Maps are graphic representations that facilitate a spatial understanding of things, concepts, processes or events in the human world."

Harley and Woodward, 1987

"Maps, like theories, have power by virtue of introducing methods of manipulation and control that are not possible without them. They become evidence of reality in themselves and can only be changed through the production of other maps and theories."

David Turnbull Maps are Territories, 1989

Eskimo wooden map (floats, and easily carried in a kayak) "...wood was, and is, the most distinctive medium used by the Greenland Eskimos in mapmaking. ...carved in relief to represent the rugged coastline... the outline of the coast is carried up one side and down the other."

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# 1•2 a mapping overview

### Why Community Mapping?

Community and Green Mapping affirm the integrity and diversity of local places and people as the primary foundation for healthy community development and sustainability. In an age of globalization, monoculture and virtual reality, we need such processes to reconnect ourselves to one another and our distinct and unique home places.

### **Creates a Sense of Place**

Maps are tools that shape our perception of place. All humanity, particularly the majority who live in cities, is challenged to protect, enhance, and create healthy social and natural environments. Community mapping provides an inclusive and graphic framework for people to share their experiences, knowledge, and vision about their home place.

### **Facilitates Dialogue**

Community mapping is as much about process as it is about getting the map done. As a participatory and creative educational tool, mapping relies on the active engagement of participants to think together graphically and not just verbally. The process of mapmaking can bring together diverse perspectives and people to affirm different experiences and worldviews, to create dialogue and common understanding.

### Transforms "Reality"

Community mapping is about transforming power based on the re-presentation of personal and collective realities. For people concerned with development issues, mapping can be a powerful tool for community learning, planning, and development. Citizens locate and affirm the historical, physical, social, cultural, and even spiritual attributes of their home place. Through the process of naming their realities through the creation of maps, communities are better equipped to proactively plan their own lives and communities.

Together the inventory and the dialogue about "the place we call home" can lead to new possibilities for nurturing healthy people, communities, and ecosystems. Community Dreams' Mapa Verde Cuba

Social work needs the mobilization of power. Each one collaborates with what he/she can do or is able to offer. This way, the fabric that supports the action gets stronger and each one feels that they are a small part of the country's transformation".

Zilda Arns Brazilian physicist and National Coordinator of the "Pastoral da Criança"

### a mapping overview $1 \cdot 3$

### **Community Mapping Values**

cherishing the past, valuing the present, visioning the future

#### **Asset-Based Development**

The people-centered, participatory methodology behind community mapping is also popularly known as "asset-based" development. It is distinguished from needs-based, expert-led community development processes. Asset-based development provides a creative process through which communities can rediscover their local assets and mobilize their strengths to build more sustainable communities. Asset-based development is defined by three characteristics: (1) it starts with what is present, not what is absent; (2) it is internally focused to

stress the importance of local definitions, visions, means and ownership of development; and (3) it is relationship-driven. In his book, Building Communities from the Inside Out, John McKnight identifies mapping as the key tool for identifying and mobilizing key social, economic, and ecological assets in a community, beginning with individual capacities of residents and extending to specific sectors and themes. Asset-based development affirms the intrinsic capability of communities to find solutions to the challenges they face.

### **Transformative Learning**

Community mapping assumes that each person has lived experiences, gifts, and ideas that need to be affirmed in the learning process if we want to create new energy and meaning together. Community mapping believes that the approach to teaching and learning - "pedagogy" - is not neutral and can energize or alienate the learner. The passive, "banking" approach to learning assumes that individuals are empty vessels to be filled with knowledge. However, nature and energy is constantly in change and transforming itself. Paolo Freire, the Latin American pioneer of transformational learning and popular education, believed in the power of people, particularly those suffering exclusion and oppression, to become active subjects rather than passive objects of history. Community mapping believes we all have the ability and right to name our own realities.



Involved mappers! Mapa Verde Cuba

What you want to See change?

houses, Some cheaper normal; but not bad houses.

Sions

-Better driving -no bullying make more friends -make more Friends -getting better at math marine walks

Excerts from children's vision maps Victoria, Canada

# 1•4 a mapping overview

### **Participatory Planning and Design**

Community mapping is an effective and creative tool for gathering information for community planning and design. Plans are based on maps; however, often cultural and ecological diversity and intergenerational experience are not represented on institutional maps. Planners rely on maps to represent reality so if community sites and values are not on the map, in the minds of planners, they may not exist. Economic, social, and environmental values and features can be simultaneously represented on a community map, facilitate dialogue and future visioning and planning independent of, or in partnership with institutions such as academic, government and private sectors. Community mapping processes acknowledge the visible and invisible layers that make up a place: from original



place names and historical land use, to food systems, cultural history, economic development opportunities, and neighborhood visions.

Community health mapping, Canada

"Somewhere between the rainbow and the internet, a place that is important to you is struggling to maintain its integrity...

Whatever happens on the worldwide web, shards of histories, ecologies, economies and cultures are heaped and shifted on bits of land. Many of us understand ourselves in the world as much through a relationship with a patch of ground (or more than one) as with people. Indeed it is hard to separate them."

> Sue Clifford Common Ground UK

"No amount of technology Seals substitutes for the lived experience of a real person in an actual place" John McKnight Best sunset close to downtown close to Beacon Hillpark close to Dallas Rd walk- ocean + mts. close to Dallas Rd walk-

# Community Mapping Stories

Community mapping activities support overall community building and planning. Almost anything can be mapped! Various frameworks or themes can focus community mapping efforts and help to support discussion about an issue such as land ownership or future planning goals. The mapping can be directly used to develop community action projects. "The maps become a source of collective knowledge about place –a level of knowledge that no single individual, corporation, or government agency is ever likely to match. This leads to empowerment, and to decisions about growth and development that better helps us to achieve the goals that most of us share: social justice and ecological sustainability."

Doug Aberley, 2002

### **Theme and Project Ideas for Community Mapping**

#### **Culture and Social Heritage**

Community history atlases (including pioneer and First Nations (indigenous) settlements) Heritage sites tours, websites and booklets Seniors' memory books (based on interviews by local youth)

### **Conservation and Greening**

Remediation sites Heritage plants and fruit trees Lost streams and lost species maps Greenways and green spaces Insects and amphibians Local/migratory birds and butterflies Underground water sources Toxic sites Food security projects Community and native plant garden sites Wildlife corridors and migration routes

### **Community Planning**

Overall planning and visioning Local associations and organizations Traffic patterns and

mass transit/bike lane studies Poverty and wealth (environmental justice) Land ownership, use, and resources Housing types (sprawl reduction) Gentrification Park assessment and use Emergency plan or hazards

#### **Economic Development**

Capital flow Resource use Local business and historic trends and opportunities Vacant lots, opportunity sites, and markets Income and demographic trends Green businesses and services Energy generation Fair trade

#### **Personal and Community Health**

Personal assets and life journeys-visions Health trends and patterns Social inclusion (ages, culture, gender, class, abilities)

"So much surveying, measuring, fact gathering, analysis, and policymaking leaves out the very things which make a place significant to those who know it well"

Sue Clifford, Common Ground UK

# 2•2 a mapping stories

### Conservation

**The Victoria Fruit Tree Map**, managed by the non-profit group LifeCycles, developed and uses a regional map and database of local fruit trees as a food security and harvesting project. Annually approximately 15,000 lbs. of fruit is gathered, with one-third of the food going to the owners, one-third to local food banks, and one-third to bottle juice to support Lifecycle's work. **www.lifeyclesproject.ca** 

**The Salish Sea Mapping Project** have created artistically-rendered maps of the islands between Vancouver Island and mainland BC, Canada, using diverse layers such as agriculture, aboriginal heritage sites, apples, sounds, and birds. The maps were an inventory of the cultural and ecological wealth of the islands and were used for community advocacy and planning in a region endangered by rapid development.

#### www.landtrustalliance.bc.ca/public/salish.html

See Giving the Land a Voice – Mapping Our Home Places for in-depth information on themes and techniques for conservation and bioregional mapping.

See **www.shim.bc.ca** for information and global case studies of community-based conservation mapping.

### **Economic Development**

**Food System Mapping** identifies the links, gaps, and opportunities between producers, distributors and economic development consumers. GroundWorks created a regional food resource directory and map to identify local and organic farms, stores, and restaurants to enhance and connect the local food economy.

#### The New York Community Mapping Assistance Project - CMAP

created a Poverty Map of New York City for major funder Robin Hood Foundation. They used GIS on available poverty data and sources to best visualize this information for specific needs. CMAP is the developer behind OasisNYC.net, an open space mapping system cocreated by NYC and several eco-organizations, including New York's Green Apple Map.

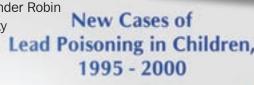
#### www.cmap.nypirg.org

See Guides to Mapping Local Business Assets, Economic Capacities and Consumer Expenditures by John McKnight for more ideas on themes and strategies.

### **Culture and Heritage**

#### The James Bay Community Mapping team created a

Neighborhood Atlas with layers of information about historic to present day land-use—including geology, flora and fauna, fruit trees, and precontact First Nations village sites and land use. This information is used to develop local food projects and community heritage projects and walking tours.



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Number of Children Diagnosed with Lead Poisoning 322 - 500 501 - 1000 1001 - 1500 1501 - 2000 2001 - 3152

# **The Vancouver "Our Backyard" Mapping Project** used a global map on wheels and in seniors' workshops to celebrate the multicultural character of the neighborhood. They also mapped and photographed old homes and long-time residents for a walking tour booklet.

See EcoTrust Canada's web site **www.firstnationsmaps.org** for other examples.

### **Community Plans and Visions**

The Victoria Burnside-Gorge Neighborhood Mapping Project did a whole school and parent mapping workshop to identify community assets and opportunity areas. "What do we have now?" and "What do we want to see?" were guiding questions for this project, which included identifying green space and community-friendly sites and unsafe areas such as traffic hazards and crime areas. The information was overlaid with a community futures map, which identified potential locations for change and community development. The neighborhood used this as a basis for neighborhood revitalization and planning and advocacy with the city authorities.

On Vancouver Island, Canada the Municipality of Saanich, the Port Renfrew rural community and the Victoria West neighborhood worked with Common Ground to use community mapping of personal, community, and environmental assets as the basis for their **Community Vision Mapping Projects**. "Cherishing the Past, Valuing the Present and Visioning the Future" was the umbrella slogan for the projects. Activities included fun all-ages hands-on mapping events, walkabouts, focus groups, interviews with elders, community art and photography, and a consensus process to identify community action and renewal projects.

### Personal and Community Health

The Promoting Action Towards Community Health Project in Victoria used mapping for health promotion and the identification of community action projects. They used public education evenings, pizza nights, and walkabouts to identify local assets and visions. These were placed on a community map with photos. They conducted a 900 person survey on personal health. This data was placed into a 25 page layered atlas which analyzed all the data for planning purposes.

See Building Communities from the Inside Out and The Community Planning Handbook for more examples.



### More Community Map Ideas

- A cloth/quilt mural map representing a street or local park created by a seniors group as they remember it at a certain period in time
- A paper-mache map inventory of the trees, wetlands, and native plants on your property or street
- A First Nations map showing burial, foodgathering and village sites
- A youth Green Map of downtown services and youth-friendly places
- A city street map showing the distribution of wealth and housing types
- A futuristic map drawing of a school block done by a school class

For most locally-based community mapping exercises it is useful to define this exercise as the place you inhabit – where you live, work, recreate, produce, and consume on an everyday basis. With other diverse groups and exercises, finding a common place for all may be the entire country, the human or animal world, or even the universe ...use your imagination!

Green Cities

by Beth Ferguson

& Juan Martinez

# 2•4 a mapping stories

# **Green Mapmaking**

A major international movement for community mapping is being developed by the Green Map System. The mission of the global Green Map System is to promote sustainability and community participation in the local natural and built environment. Green Map offers a global iconography, resources, and a supportive network for making environmental and cultural maps, empowering local project leaders to give familiar places a fresh perspective. Green Maps function as practical guides to greener living while helping spread model initiatives to new locations.

The Green Map System is a locally adaptable, globally shared framework for environmental mapmaking. It invites design teams of all ages and backgrounds to illuminate the connections between natural and human environments by mapping their local urban or rural community. Using Green Map's shared visual language – a collaboratively designed set of lcons representing the different kinds of green sites and cultural resources – Mapmakers are independently producing unique, regionally flavored images that fulfill local needs, yet are globally connected.

Whether created in a community workshop or the outcome of years of effort, the resulting Green Maps identify, promote, and link ecological and cultural resources. Each of these maps creates a fresh perspective that helps residents discover and get involved in their community's environment, and helps guide tourists to special places and successful green initiatives they can replicate back home. Because all Green Maps use the same symbol system, they help us communicate and build capacity for model projects, even if we never visit the site itself!

Whether published on the internet or printed, in a mural or poster format, Green Maps help illuminate important issues and build networks to address problem sites and expand involvement in positive change.



Green Map Network - over 400 locally led projects in 50 countries

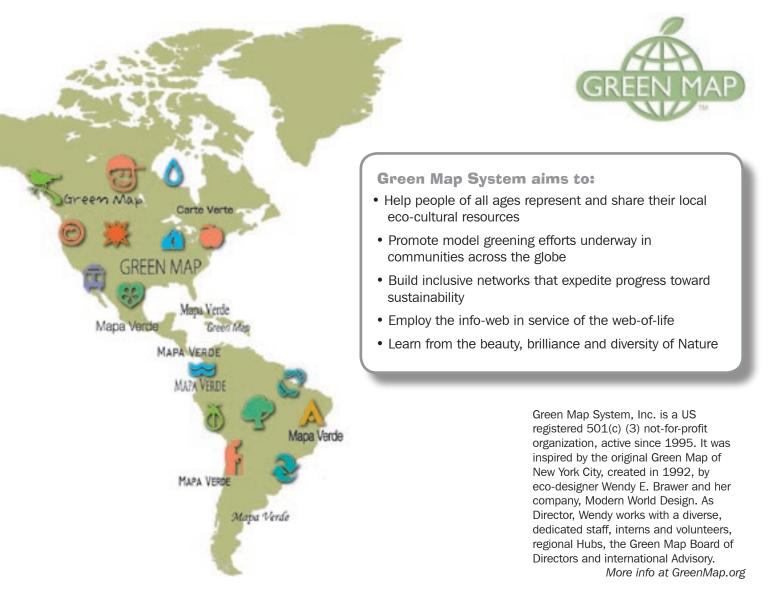
# mapping stories 2.5

The Green Map network is active worldwide, and constantly growing. Projects have taken place in over 400 diverse locations in 50 countries. The network has grown to chart not just cities but also rural villages, small towns, bioregions, school campuses and even offices and green businesses. Every Green Map is the result of a locally-driven process, but one that is influenced by other Mapmakers' experiences. To register, visit the Participate section at GreenMap.org. Not only will you receive the right to use Green Map's copyrighted lcons and a complete suite of adaptable tools and guidance based on experiences around the world, you will be able to promote your Green Map and your organization to a global audience. Share your story and your Green Map with the world! Schools, youth clubs, individuals, even businesses with social and environmental programs can register and take part.

Green Mapmakers at the central office in New York and in regional "hubs" collect the processes and outcomes, then create resources, such as this booklet, that help others meet their diverse project objectives. GreenMap.org is the online presentation, collaboration and resource center. Together, they form a powerful impression of how communities around the world are making progress toward ecological and cultural sustainability.

Green Map System serves as a support and outreach center, connection point, and archive. Each local Mapmaker has an important role in the global movement's future. Your methodology, local icons, the maps and other materials help shape the path for the next generation of Green Mapmakers. Your ideas and help are always welcome at Green Map System.

Green Map System, 2007



# 2•6 a mapping stories

# **Green Mapmaking Stories**

Carte Verte

Villeurbanne

L'écocitoyenneté

Community

Green Map

of Victoria

and Region

and

Portland, Oregon ICTORIA FALLS

Greater Bedminster Green map

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Printed and web-based Green Maps are being made locally on six continents! There are over 300 maps published and many mapping projects with wonderful stories to share. In Europe, Asia, and the Americas there are emerging regional and national networks. In countries such as Japan, Cuba, Brazil, and Indonesia, there are national and regional networks (Hubs) that are well organized and extend to all levels of society, particularly schools and neighborhoods, artists and designers, universities, and government. Many of them use community mapping processes as they create unique maps, which

all use the globally designed Green Map lcons. (see icons pp.3•2 and 3•3) Here are some of their stories from around the world!

are some of stories from ad the world!

mapping stories 2.7

### Cuba

Cuba is a country with rural and urban Green Map projects in all of its 14 provinces. Their network is called Mapa Verde Cuba. The Island of Cuba and its small surrounding islands can be found in the Caribbean with a population of 11 million. Cuba is known for its beautiful nature, special flora and fauna, its appreciation for science, and great diversity of natural resources. Cuba's greatest richness is in its people who are a magical mix of native indigenous people, Spanish, African, and Chinese and this is reflected in its culture and idiosyncrasy.

After an inspiring visit to Cuba in 1998 by Wendy Brawer, Mapa Verde Cuba was initiated in 1999 simultaneously in the cities of Holguín and Havana by city youth group leaders. Shortly thereafter the Mapa Verde Cuba Network took shape in community after community. The Network, with the support of the Center Felix Varela, coordinates workshops, learning, and resource development for the whole country. Two powerful Green Map video documentaries have been made and digital newsletters and a Green Map methodology book have been published.

The Mapa Verde participants cross all sectors of society: retired people, students, and community members (including professionals) from ages 5-85! There are about 75 teams of mapmakers, each with a coordinating group. With the structure of the Mapa Verde network, different regions can create their

own coordination system. There have been 40 primary schools, 12 secondary schools, two high schools, two technical schools, and two special teaching schools incorporated into Mapa Verde Cuba involving 1260 student participants. More than 150 students from three important universities have also participated in the project as well as cultural, social, and scientific institutions from across the island. Cuban Elder, Mapa Verde

"We liked the Green Map System's possibilities of establishing a relationship of exchange between North America and Cuba and the global ecological movement. It seemed to be a good way to exchange environmental education methodologies and experiences as well as share our sustainable development work with the world."

> Liana Bidart Cisnernos, Mapa Verde Cuba coordinator



Sitio cultura

Sitio favorable

# 2•8 a mapping stories

### Japan

#### Japan has

130 million people with very strong cultural roots and capacity for community organization and design. Green Mapping among communities and schools has taken off with a passion, especially after 2002, when the first national Green Map network in the world was established, led by Misako Yomosa of Kyoto and Masahiro Horiuchi of Setagaya-Tokyo. Their resourceful and inclusive approach to "Hub" development is an example for other regional and thematic

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(youth, watershed, GIS, bicycling) Green Map networks. There are over 30 independently led Japanese Green Map projects today. Green Map Japan offers outreach and program development and coordinates largescale promotion and publications. At Aichi Expo 2005, Green Map sister organizations are presenting a major exhibit and the Asia Green Mapmakers meeting. Green Map Japan also supports resource and map development. The national Mirai Youth Project in 2004 supported over 300 "personal-scale" map projects by students of all ages (see Child and Youth Mapping description p.19)

### London

The London Green Map is a website aimed at Londoners that highlights community projects and services for sustainable living. The London Green Map aims to make available in a visual, attractive form, local

information to help people live in a greener, healthier way, with a particular emphasis on the diversity and creativity of community action. It is a project of London 21 Sustainability Network, which supports, promotes, and networks community-based action for sustainability in London, and is funded by Bridge House Trust. The map shows: food growing projects, food coops, farmers' markets, community gardens, scrap banks, computer, furniture and white good reuse projects, walking or cycling projects, residents' groups with a green approach, local groups, and more.

#### www.london-green-map.org

### Brazil

Brazil has an estimated 183 million inhabitants, the largest population in Latin America and the sixth largest in the world. Brazil is very rich in cultural and biological diversity with the largest rainforest in the world and a rich cultural mix of indigenous, African, and European backgrounds. There remain many development challenges including pressure to develop land, rapid urbanization, and many people who live below the poverty line. Green mapping has been very popular in classroom, college and university, and community settings.

(see Brazil Future Visions Maps p. 2•14)





Green Map kids, Japan

Download the 15 page London Green Map Pack for in-depth info on their participatory approach.

www.london-green-map.org look in: about London 21 / publications...

napaverde

Local icons, 《 Rio de Janiero

### mapping stories 2•9

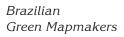
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The Brazilian Green Maps Network a.k.a. Mapa Verde Brasil, was officially founded in 2003 during the 1st Brazilian Green Maps Workshop, in Santa Bárbara D'Oeste, São Paulo. This was followed by other gatherings including green mappers from Latin and North America. In 2003 Leonardo de Mello worked with other Brazilian mapmakers to create the Portuguese Green Map Icon Poster and started the Latin American Green Mapmakers Listserver. The Network is still active, connecting the Brazilian Green Map projects among themselves and with the Latin American Network of Green Maps and Green Map System.

www.mapaverde.org

info@mapaverde.org







### Ireland

Ireland has 4 million inhabitants and a vibrant population involved in local and global development issues and alternatives. Sustainable Ireland, a worker cooperative based in Dublin, helps coordinate Irish Green Map projects in Cork and other Irish cities. They also participate in the European Green Map Hub network. Sustainable Ireland promotes sustainable living and runs the Cultivate Sustainable Living Centre devoted to teaching the skills and awareness that support a transformation to a more sustainable society.

See www.sustainable.ie to view the Dublin Green Map.

Green Map

Dublin

Green Map

Cork

"Mapping in its largest sense, is a primary tool by which

we orient ourselves to the world around us. It has tremendous power in both understanding our surroundings, and as well, in creating our realities, as we locate and name those things we find significant. We find GreenMaps fit very well in our "tool chest" of concepts and activities by which we promote awareness and attitudes which support sustainability.

They can orient the visitor to the hidden culture and diversity within Dublin; they can assist local residents and community groups to claim and value the locally significant sites and place-specific activities which are ignored by commercial map makers, and they can help local residents to develop constructive dialogues with city councils and other local authorities."

Erik Lennep, Sustainable Ireland

# 2•10 a mapping stories

# The Green Map Atlas! ...more stories!

More in-depth stories of Green Mapmaking are available for free!

Volume One of the Green Map Atlas can be downloaded free from GreenAtlas.org. This multimedia anthology of "behind the map" stories includes 10 projects from Asia and North America.

300

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Youth and community members play an important role in many of the projects. Local icons, mapmaking processes and the different sites on each Green Map are included. Students can print copies of their favorite stories or pages directly from PDFs (each story chapter is less than 1 MB). The pages can also be projected digitally or included in a display. Designed for group presentation, the Atlas's Guided Tour gives suggestions of how to use the stories to connect to learning objectives. The Atlas is available for purchase as a download, a printed book and a CD-Rom (in English and Japanese)



PUNE INDUS NIROSHIMA JARAN ROBERON COUNTY USA OPOTO JARAN OKYO JARAN

EN YORK CITY USA AKODATE JAPAN

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D CANADA

#### greenatlas.org

through Green Map System.

日本語語はこちらへ

The Green Map Atlas features stories from...





JAKARTA INDONESIA PUNE INDIA HIROSHIMA JAPAN ROBESON COUNTY USA KYOTO JAPAN TOKYO JAPAN NEW YORK CITY USA HAKODATE JAPAN MILWAUKEE USA TORONTO CANADA

#### New Green Map Books & Videos

As seen at GreenMap.org/store, find great new books about Green Mapmaking in Chinese, Japanese, Spanish and other languages. In 2007, a new DVD of videos featuring Mapmakers from Cuba, India, Uganda, Japan and other places was produced, too. Find posters, gifts, and Green Maps from around the world, too!

# mapping stories 2•11

# Child and Youth Mapping

Community and Green mapping are powerful tools for working with and involving children of all ages in the design and planning of their community and world.

### Children of all ages love to make maps!

From clay-scale models of classroom furniture, to backyard treasure hunt maps, to schoolyard and school community biodiversity maps, children easily understand the connection between the map and the territory. This connection is especially motivating for young learners when the territory is one they are familiar with or attached to. School yards and school communities are excellent starting places for teaching with and about community mapping.

### **Connecting Schools to Community**

Community mapping engages students in a process that values social, cultural, and ecological aspects of the community. Opportunities for investigation go beyond the boundaries of the school property. The presentation, sharing, or publishing of maps is also part of this process of engagement. When children know that their map work will be seen or used by others in the community, they put greater value on the process and the outcome.

### **Integrating Learning and Curriculum**

Community mapping is ready-made for an integration of the sciences, social studies, language arts, fine arts, civics, mathematics, and information technology. Mapmaking can accommodate a wide range

of learning styles and developmental stages as children investigate and represent their home territory through a variety of media. Both the scope of the map (size of territory represented) and the method of representation (threedimension model, panoramic view, aerial view, contour map etc.) can be tailored to children's conceptual and social development. For example, a younger child's "territory" will be smaller in scope—perhaps the house and street, with an easily understood panoramic view as the representation. "For me it is really important that learning not be always a study of what is out there, in other places, all the time. When my class were doing the geography of making their own maps, it was their geography, their place. Today I just came from my class and one of my kids said, "We are history". Mapping has been a wonderful way for them to develop that feeling of being a participant."

> Susan Underwood Canadian Schoolteacher



# 2•12 a mapping stories

# Child and Youth Community Mapping

### Liberian Clay and Stick Maps

The Liberian Children and Youth Mapping Project 2005 was coordinated by Canadian student Michael Allaway. In Central Roysville, Bomi County, Liberia, Michael worked with teachers and a youth leadership group of 5 and 30 students ages 12-20. Over several months they created an environmental map of the school area using clay and sticks. Then they made detailed diagrams and sketches of local plants, including a rudimentary classification system: Medicine/Food/Decorative/Dangerous. They finished their project by documenting cultural stories of the area, using the map and 'family trees'.

"O jovem não é o amanhã, ele é o agora." "The youth is not the tomorrow, it is the today." Herbert de Souza, a.k.a. Betinho Brazilian sociologist and human rights activist



Liberian Children's map photo: Michael Allaway

### Asset Mapping with the Environmental Youth Alliance

Community asset mapping is one of the many effective tools for engaging children and youth in local government. When most of us think of maps, we imagine professional drawings that identify and locate resources, territories, and peoples. These maps also convey institutional power and authority. Community mapping changes this perspective by locating a much different source of power: children and youth. Mapping supports local engagement by helping children and youth chart their perspectives, ideas, needs and visions for the community. **www.eya.ca** 

#### Youth Health Service Mapping

EYA staff worked with over 50 youth from diverse backgrounds in Vancouver, Canada, creating maps by answering questions regarding health services such as "what would an ideal health service look like?" This information will be used by youth and health service providers to create better healthier services for youth in their city.

#### Youth Mapping of Parks

Children and youth from communities such as China Creek in Vancouver, Canada, Collingwood and Renfrew mapped their local parks. From these maps actions such as presentations to community centers, city planners, and the local community were made with the goal of making the parks more child and youth friendly.

#### International Children's Conference on the Environment

Children from over 70 countries came together and used mapping as a tool to create challenges to the world leaders gathered in Johannesburg for the World Summit on Sustainable Development (WSSD). The children made maps using an outline of their bodies, adding their personal values and local-global environments. The compiled information was then brought by two delegates from Canada, to WSSD, delivering the challenges which were written up in the final political statement of the conference.

### mapping stories 2•13

# Child and Youth Green Mapmaking

Children and Youth have been an important part of Green Map System since the beginning. Youth Green Maps are most often a neighborhood version of the larger citywide maps. Participants can select from a special sub-set of 50 "youth" Icons from the Green Map website as they decide what to include on the map (sometimes they use the full set of 125 Icons). Participants can make their own sub-set of the iconography as they decide what to put on their own map (it can be confusing to use the full set of 125 Icons). Narrative text, background information, photos, drawings, poems – there are all kinds of creative forms of Green Mapmaking. Older community members often take part on these Mapmaking teams too.

eiv

Green Map System created Green Maps for New York City, both to benefit the community and to pilot new concepts. LoMap involved 250 kids in nominating sites. 2006 projects include the energy-themed Powerful Green Map and one charting Composting in Manhattan – find all at GreenAppleMap.org. NYC's youth were among the first to publish their own Green Map - Pedaling Brooklyn's Gardens, published in early 1999 by Recycle A Bicycle's 1998 summer project participants!

### Some Child and Youth Green Map examples...

### New York Recycle a Bicycle (R-A-B) Maps

Through its repair/bike safety programs in Brooklyn and upper Manhattan (Inwood), R-A-B has continued making Green Maps, always including justice issues and having fun getting involved in making the community a better place. To date,

Recycle-A-Bicycle has published:

**Sprout to Action** (local food, Inwood), 2004

**Space to Breathe** (on air pollution and asthma, Inwood), 2003

- **Go Green NYC** (car-free mobility options, Brooklyn), 2002
- **Stop Fronting** (who is blocking public access to the East River waterfront, Brooklyn), 2001

lino-cut by Beth Ferguson

Are We Trashing the Apple? (charting the city's Garbage Crisis and poorly planned transfer stations, Brooklyn), 2000

#### **Pedaling Brooklyn's Gardens**

(Greenpoint-Williamsburg's community gardening, Brooklyn), 1999



Lower Manhattan's Environment, as Seen by Youth

# 2•14 a mapping stories

### **Brazil Future Visions Maps**

The Parthenon School in Campinas, Sao Paulo, Brazil worked with Grades 2 and 8, involving approximately 80 students and 8 teachers. Coordinated by Professor Attilio Cereda, the interdisciplinary project was called "Campinas, A New Look". Grade 8 students visited the historical centre of Campinas and identified environmental problems and solutions. Grade 2 students made maps of their immediate school surroundings. Then all the students made two maps: one of the "real city" and the other of the "city of their dreams", where they projected what they would like to happen. They also built 3-D models in which Green Map Icons appeared in signs like transit entrances. The project fulfilled its objectives: to raise sensitivity, to develop critical awareness, self esteem, and a conscience about the responsibilities students have as citizens of the world. Their work was exhibited at the Interdisciplinary Work Fair and seen by over 2000 people.

### Calgary Children's Green Map -Converting Military Base to Parks!

The very first youth-made Green Map was made with Child Friendly Calgary when the Building Blocks' Neighborhood Green Map was completed during the summer of 1998. This project gave kids a chance to voice their opinion about what they value at the C.F.B.

West military base, which is now converted into a public park in the heart of the city. Even though they created just one large-scale copy, its depth impressed older community members and enabled the young people to have a say in designing the new park. They created several new icons, including one for Youth-friendly eco-spot. It became part of the global lexicon and has appeared on Green Maps around the world.

### **Cuba Teachers, Youth and Elders Maps**

) SANDITO

Campinas Vision

Model Maps, Brazil

Two school teachers and ten students are Green Mapping the rural area of Bungo La Venta, in the municipality of Contramaestre, in the province of Santiago de Cuba. This is a small community of 74 square km. The Nature Icons reflect the biodiversity of this place. You can find the following Icons: Insect Watching, Bird and Wildlife Watching Site, Wetlands and many more.

Some problems highlighted by the Mapmakers:

- Water pollution source it was cleaned up by the community, and replaced by a garden.
- Use of slingshots, especially by youth now they are protecting the birds nests.

One of the future objectives is to build a park for kids, create a place to sell farm products and organize reforestation projects to conserve some native species. Former derelict site restored, Mapa Verde, Cuba



### mapping stories 2•15

In Holguin, Dr. Rafael Torres Carlos Manuel de Céspedes and Roberto Rodriguez led one of the first Green Map projects in Cuba. The focus was on health-related issues, and the map was created with the help of students in 1999. Now they are working in different areas. They improved the Reparto Lenin Park in coordination with Poder Popular and communal services. The school functions like an environmental reference center and is home of Holguin's Green Map.

In Consejo Popular Príncipe, in the municipality of Plaza, Havana, an intergenerational group of youth and senior citizens developed creative initiatives to recover green spaces and created pocket maps for the elderly. They have used these small Green Maps for city sanitation and social projects. They have some thematic maps about cultural personalities, too.

In San Miguel del Padrón, Havana, youth from Antonio Perez school and the leaders Katia Portal and Mercedes Vega made an biodiversity inventory/list Green Map. With it, they identified some native animals/ plants and traditional medicine sources.

#### Japan - Mirai Children and Youth Green Map National Project

Mirai Green Map was a national-scale project led by Green Map Japan during the summer of 2004. The word "mirai" means "future" in Japanese. With a sustainable future in mind, this project was

dedicated to children and students, who are the catalysts of the future. Various channels of communication were used to encourage children from all over the country, aided by older students, teachers, and community leaders, to submit their neighborhood maps. The project's leadership team produced a Starter's Kit, which was a set of mapping tools for youth that came with a magazine, an Icon poster and Icon stickers. The magazine featured interviews with exemplary youth projects from 5 different countries. The team distributed the Starter's Kit for free to every individual, group, or school who showed interest in mapmaking as a summer challenge. The team managed to collect approximately 300 completed maps all showcased on online.

お雨り:1052 などの一部のブラウザーでは正しく表示されないことがあります。

Visit the website to see the colorful and inspiring youthauthored maps. Site images from various places in Japan also offer a glimpse of everyday Japanese life where cultures, traditions, and nature intersect. You can access the maps and photos by either clicking the colorcoded regions of Japan, or search by Green Map Icon. **greenmap.jp/mirai**  Working with youth in the schools on Mapa Verde projects helps young people see their work become a transforming movement in their communities. The experience helps reinforce community and environmental values, develop skills, and, create a sense of ownership - these are positive actions for sustainable development. Mapa Verde Cuba



日本地図からえらぶ

ろいクリート・フ事業 グリーンマッパジャパン 予算支援大学部内工社研究室 nitaiのgreenmap.jp

# 2•16 green map icons

### Santa Monica – Watershed and Campus Mapping

Sometimes architects and designers take the lead in Green Mapping. In California, architect Isabelle Duvivier works with Santa Monica High School and College to involve students in habitat research and sustainable watershed restoration and design. The Santa Monica and Ballona Watershed Green Map and the Santa Monica College Green Map are two products from this ongoing learning and design process.

#### www.lagreenmap.org



### The Youth Green Mapmaking Resources

At GreenMap.org, register your project and download the Green Map Icons, activities, surveys, a sensory journal and other adaptable resources. Everything is designed to be used flexibly by K-12 teachers and youth groups. Download more, including graphics, a style guide, slideshows and new mapping modules for use on class field trips. Or if you want to create a nominations-based project involving many schools, clubs and individuals, download the Multi-Map Manual, which is a complete guide based on the process created to make LoMap, the youth authored Lower Manhattan Green Map. Find out more in GreenMap.org's Resources section and see what's new at

GreenMap.org/youth





### 33 Boys Club Computer Center 287 East 10th 212 · 533 · 2550 © bcny.org/HARR.htm Girls and boys from ages 5 to 15 tutor one another after school. I · 15

from the Ballona Watershed Green Map

lackie 🌢 C



Create an exhibit for the school that connects your local mapping project to the worldwide movement - download pages from GreenMap.org and GreenAtlas.org, include existing maps of your community, and sketch maps and pictures created by the students.

Green Maps, among their other virtues, offer the prospect of a "common text" of ecological and cultural resources that can provide linkages between private visions and chronic public needs. The most successful projects in my view are those that combine youth projects with "city-wide" projects. Working alongside adults helps students develop skills related to investigation, design, written and oral communication, agriculture, stream and park restoration and more. Kids need skills, and adults need to communicate their respect for youth initiatives without holding youth responsible for ecological problems which we adults have made ourselves.

Dr. Robert Zuber, Green Map Education Director 1998-2003

green map icons 3•1

# Green Map System Icons

The Green Map® Icons are the heart of Green Map's global program. This collaboratively designed visual language identifies, promotes and links ecological and cultural resources on every Green Map.

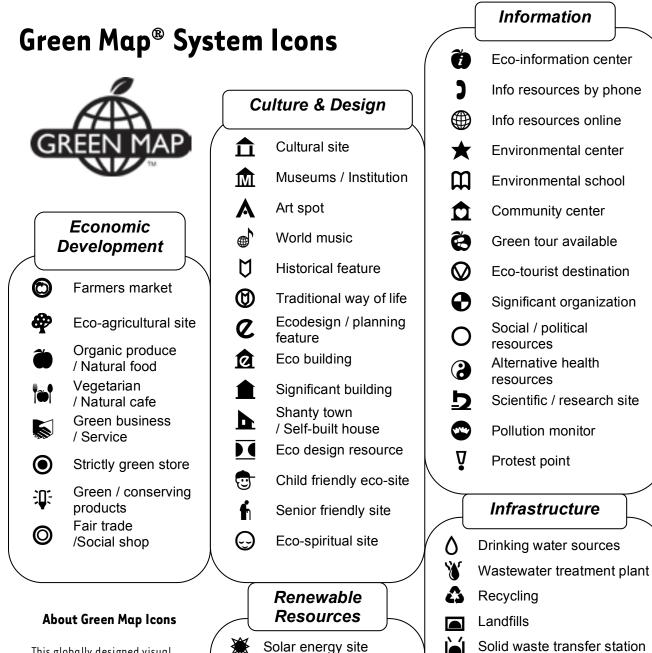
Icons make the Green Maps easy to explore, regardless of the language and cultural orientation. There is general agreement on each Icon's meaning, but the local Mapmakers determine precise definitions for the Icons they use. Mapmakers are also continually inventing new local icons, many of which get "adopted" into the globally shared set - young people especially enjoy creating new place-based symbols!

Green Map's Icon Poster can be downloaded in 10 languages: Arabic, Chinese, English, French, German, Indonesian, Japanese, Polish, Portuguese and Spanish.

The Green Map Icons have been digitized into a font, so they can be typed in from any keyboard. There is both a PC and a Mac version, and our Mapmakers have been able to use them with virtually every kind of software. There is also a special font for the 50 Youth Icons. Use of the copyrighted Icon font and the registered trademark "Green Map System" are provided to all registered Green Mapmakers, subject to written agreement.



# 3•2 green map icons



This globally designed visual language identifies, promotes and links environmental resources – both natural and cultural – through locally produced Green Maps. A fresh perception of the city is created, and our icons help spread greening initiatives around the world. These award-wining icons are the heart of our eco-info collaboration. See the resulting maps, info on participating and more at our website. Solar energy site
Wind energy site
Renewable technology site
site
Water recycling system

- Bioremediation site
- 🖉 Composting
- Reuse site

Remediated

/ (cleaned up) site
Re-development opportunity site

Incinerator Energy grid generating facility Green Map<sup>®</sup> System

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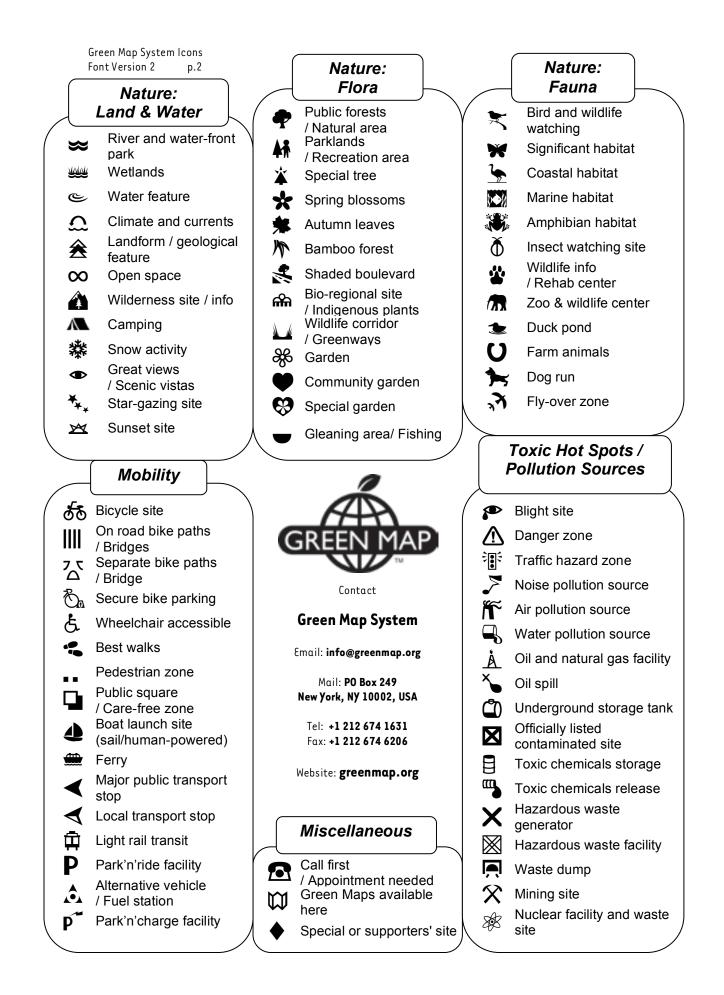
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### greenmap.org

GREEN MAP SYSTEM ICONS COMPLETE SHARED SET FONT VERSION 2 P.1

Green Map Poster © Green Map System 2003 Email: **info@greenmap.org** 

green map icons 3•3



# 3•4 green map icons

### Local Icons

Some of the many local icons being made all over the world!

"New place-based icons are being designed by mapmakers, in addition to the globally shared set of 125 symbols. It is exciting to try to convey a complexity with a single symbol - almost like a logo, it needs to be distinctive looking and easy to recognize. Can you make an icon for a special site? Green Map System collects these for the website, so be sure to send it in!"

Green Map System

#### www.greenmap.org



Mountain Biking Surfing Rio de Janeiro, BR Rio de Janeiro, BR



Relaxing Spot

Tokyo, JP

**Public Bath** 

Tokyo, JP

**TrafficHazard** 

Alchi, JP

Thrift Store

Victoria, Canada

Mapmaker

Aichi, JP





Renovated Bidg.

Hakodate, JP

Trad, Festival

Kyoto, JP

Flea Market

Aichi, JP





Rec.Equip.Rental

Toronto, CAN

Comm. Garden

Cuba

11/2

Special Tree

Cuba

Cernetary

Cuba

Flying Squirrels

Kyoto, JP

Bouly, Garden

Guelph, Can

Railway

Pune, India

Kids' Secret Base

Tokyo, JP

312

Carpinteria

Cuba

Athletic Field

NJ, USA

Tidepool

Victoria, Canada

Foot Bridge

Guelph, Can

Machiya

Kyoto, JP

Green School

Cuba

Family Doctor

Cuba

Auto Repair?

Cuba

Diente de Perro

Cuba

Sled

Jakarta, Indonesia

Radio Tower

NJ, USA

Tractor

Robeson, USA





Hot spring Hakodate, JP





Rio de Janeiro, BR



Dolphin & Whale Aichi, JP



Ebb Tide

Aichi, JP



Jakarta, Indonesia















Aichi, JP

Hils Hakodate, JP

00 6e

GM Girl BAD

Traditional Craft Aichi, JP

Red & Blue Tide Aichi, JP



Sea Turtle

Aichi, JP

Comm. Farm Tokyo, JP

Bike Repair Shop Heritage Rural Lan.

Hiroshima, JP

comm.health-care Renewable Energy GM Girl GOOD

Hiroshima, JP



Aichi, JP

river water-Level

GM Boy BAD Hiroshima, JP



GMBoy GOOD Hiroshima, JP









**Drinking Water** 









Climbing,

Rio de Janeiro, BR

Beach Games

Rio de Janeiro, BR

Aboriginal Feat.

Adelaide, Aus

Handicrafs

Pune, India



Recycling Spot

France

Gouda, Holland







Hang Gliding

Jakarta, Indonesia

Hotel (Budget)

Jakarta, Indonesia







Beach

Yellowknife, CAN Rio de Janeiro, BR Rio de Janeiro, BR

Ethnic/Trad.Culinary Stream Restoration Banana Plantation

Victoria, Canada

Shrine & Temple

GMkids JP

Art Supply

Winter Sports3 Yellowknife, CAN

Tirapiedras

Malecon

Cuba

Bird Nest

Cuba

Spider

Cuba

Osprey Nesting

Victoria, Canada

Snow Boarding

Yellowknife, CAN

Ice Skating

Yellowknife, CAN

Winter Sports

Yellowknife, CAN

Murcielagos

Cuba

### mapping tools 4.1

# Community and Green Mapping Activities

Community mapping and Green Mapping are creative learning processes. The following Mapping Tools section (pp. 4•1 - 4•22) offers workshop and design examples and outlines for you to use or adapt.

### **The Learning Space and Process**

### Ingredients for community mapping workshops

Community mapping projects often begin with or include a classroom-style workshop. This does not exclude community research, walkabouts, interviews, data collection, and other activities. However, building the group or the "team" is central for most community mapping projects. Here are a few guidelines for creating a positive learning environment for sharing, dialogue, and community action.

### **Classroom Style Workshop**

#### Provide a comfortable space

Ensure you have a bright room or space to work in. A set-up where you provide groupings of tables, each with five or six chairs is ideal. If you are outside, use what you can!

### Provide a welcoming atmosphere

Participants need to be welcomed by the facilitators and hosts and have informal time to meet one another through friendly introductions, warm-up activities and refreshment breaks.

### Ensure the process is guided by skilled facilitators

The main facilitator(s) need to feel comfortable both speaking to a large group and guiding the small group (3-6 people) mapping process. Designate small group leaders to facilitate group listening and/or to record what is said.

#### Focus on participation, fun, and inclusion

Everyone's views matter and the more diversity in the group, the better. Mapping allows different forms of expression and dialogue. It literally creates space for diverse views to be expressed and for less-verbal people to be included.

### Forget about technical accuracy

Community mapmaking is about story telling and creating a sense of home place and does not require skilled artists or technicians. Narrative and specific information about a place can be gathered through the process by a group recorder or by further investigative data collection. i.e. Thematic Speakers, Field Trips, Community Walkabouts, and Inventory Collection

### Keep it Simple! Basic Materials for Mapping

Find something to draw with and on. A basic community mapping workshop uses large pieces of newsprint paper (i.e. 3' x 2') and markers or crayons. Magazine clippings, diverse art supplies, and ingredients from nature representing your local bioregion all work.

Communities worldwide have created chalk maps, clay maps, tapestry maps, wood maps, and maps with photos, poems, and songs. Unleash your creativity!

SLOW DOWN. Wisdom comes through walking, talking and listening. Common Ground UK

# 4•2 mapping tools

### **Workshop Examples**

Group size: 1-10

Time: 1.5 hours

Objective: to connect people to place, to build group trust, to share worldviews and stories

Materials: large sheets of paper, colored pencils, crayons, or markers

Notes: This exercise takes time, so allow yourself flexibility. Taking a stretch/ refreshment break before and/or mid-way through the presentations helps to keep energy up if the time goes beyond 2 hours. Information shared by people can often be very personal and sensitive. The facilitator can encourage the group to listen (with their ears, eyes, and heart) and to hold in confidence information shared.

### **Personal Journey Mapping**

#### **Introduction - 15 minutes**

This exercise requires a careful introduction and is best done with a group that will be working together for some time. Arrange seating in a semicircle. Participants can introduce themselves, sharing something that is unique about them—e.g. where their name came from, favorite color, or favorite food. The facilitator describes a personal journey map, noting that each person's map is full of rich stories, with significant turning points, joys and sadness, and particular places and people that have affected them (facilitators can give examples from their own lives).

Guiding questions are:

What are the significant events, people, and places in your life?

What are the major turning points? What have been the key insights or learnings?

The facilitator encourages participants to draw or map their journeys in any way they wish, to take time to think deeply about their lives, and to work in silence. Using the physical landscape (i.e. mountains, valleys, rivers, deserts, cold and warm places, and darkness and light) is one way to describe a journey. Tell the group that they will be asked to share their maps, in as much detail they wish, once they return.

### Individual Mapping - 30-45 minutes

People take their mapping materials to a quiet place to make their map. Once they are finished their map they return to the group.

### Group Presentations - 10-20 minutes per person

The entire group is called back together to present the personal maps. This is on a voluntary basis. People hold up their map or put it on the wall while describing their journey, the key events, and insights. Encourage them to aim for 10 minutes to present their map, but do not rush anyone along too much. Make sure each group has time to present.

### **Closing - 10 minutes**

Each person shares one thing they have learned about themselves and others. Everyone is thanked.

Childhood Place Map

### Variations on Personal Journey Mapping

### **Personal Assets Map**

What makes you unique? What is your special gift to the world? Assets are defined in this exercise as personal idiosyncrasies, gifts, and capacities. Each person is asked to draw themselves and either draw in or list five (or more) assets that they have. These can be drawn onto a piece of paper as a face or abstract drawing or put up on the wall and grouped under different categories to create a collective inventory. Others in the group can add in assets that they see in each other. (See McKnight, Building Communities from the Inside Out or Youth Asset Mapping Manual for more ideas).

### **Childhood Place Map**

Think of a special place from your past or childhood. Take time to remember the details of the place and to draw it (15-20 minutes). Share this with the larger group. This can also be shared simply as a story. Sometimes people are encouraged beforehand to bring in a photo or to prepare a presentation about the place. The group reflection or debriefing centres on what makes places special to us.

### **Favorite Place Maps**

Think about a favorite place in your life. Map where it is. Photograph it and write a brief story, poem, or song about it and about why it is so special to you. Share this with the group. This can also be developed over several weeks as a celebration of community and sense of place project. It could be exhibited at a school, community center, or art gallery.

and an and a second second

from a squatter Community Map, Nuestra Comunidad, Rosario, Argentina

RECONQUISTA

J.J. PASO

Favorite Place Map "My elephant tree is my special spot because it looks funny! It makes me feel good. I like to go there."

Company and

# 4•4 mapping tools

Group Size: 5-30 (very flexible)

Time: 1 hour (with discussions and variations 2 hrs)

Materials: colored markers, colored strips of paper 1 x 2 " (five per person), a planning diagram

A planning diagram is a large 3' x 5' piece of paper labeled: "Essential Features of a Healthy Community" with three intersecting circles labeled: "Environment (Natural and Built)", "Economic", and "Social-Cultural", with the central intersecting circle labeled "Health." You will put this up on the wall.

Notes: This exercise can be adapted to many groups and settings and can be followed by in-depth discussions of balancing values and priorities. For example, once all the features are placed on the planning matrix the group can decide which are the most important and why.

### **The Planning Game**

#### **Objective**

This activity explores the values that influence personal and community decision making. It can be used with all ages and provides an excellent basis for group building and for representing the individual and common values behind a community mapping and planning process. It also compliments "quality of life" and "sustainability indicators" planning exercises.

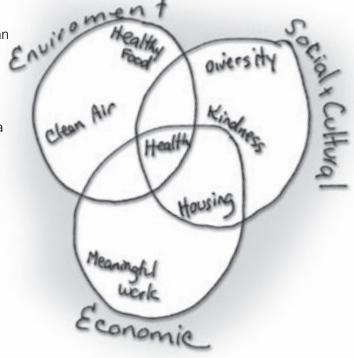
# What is a Healthy, Livable Community to Me? to Others?

Begin by introducing yourself and have the group members introduce themselves and the places they call home. As an option people can also share an adjective that describes what a healthy community should look or feel like (e.g. "Hi, my name is Sarah, I live in Sunshine neighborhood and I think a healthy community should be..."). Have a recorder write down the names and the adjectives as they speak, for all to see. Then hand out five pieces of colored paper strips or post-it-notes and a marker to each person. Ask people to visualize a healthy community, a healthy place\*. Get participants to briefly share their ideas with the person next to them.

Ask participants to think of themselves as community planners or designers and to write on each piece of paper one essential feature of a healthy community. Allow them 5-10 minutes – they can do this alone but can also work or discuss with others. While they are doing this, put up your planning diagram.

Briefly explain the various components of the matrix and get people to tape up their 5 features. If your schedule permits, this is best done one at a time with each person explaining his or her features and why they chose them.

If you wish, you can now lead into a discussion on planning priorities and dilemmas, or work directly into a mapping exercise of a particular place and theme.



### **Local Place Map**

### **Create the Maps - 20 minutes**

Decide on what you consider to be your local region and draw a rough outline of it. It can be your block, your neighborhood, the whole city, or a watershed etc.

Mark your favorite places— walks, important centers, leisure spots, etc. Be as concrete or as abstract as you wish. Do not worry about scale or accuracy. Make your own icons (e.g. favorite places, green spaces, and opportunity sites) or use those from the Green Map System.

Mark your least favorite places, those you consider uninviting, dangerous etc.

Mark opportunity sites or places you would like to see change.

### **Discussion - 15 minutes**

What do you consider local? Why did you exclude other areas?

Do you remember a time when the map of your region would have been very different?

What did you leave off your map?

Why did you use certain symbols on your map?

### Variation – Bioregional Map

- Spend a few minutes selecting the place you would like to map. It should be a small area that you know fairly well, like your home, workplace, or a favorite park or beach.
- Draw outlines of your space. It does not have to be defined by streets. It could be bordered by bodies of water, a property boundary, a hill, trees, or another building.
- Mark an "X" to show where you are.
- Draw the nearest body of water if there is one. This could be a creek, ditch, pond, river, lake, or ocean.
- Are there any animals (birds, mice, cats, spiders, snakes...) living there?
- Draw or make symbols of the plants and trees in and around your space.
- Are there any outstanding features which make your place unique?
- With symbols or words, show your favorite and least favorite spots.
- With words, symbols, or images describe what certain places on your map mean to you.

#### Group Size: 5-25

Time: 30 minutes – one hour

Materials: large sheets of paper and colored pencils, crayons or markers

photocopies of Green Map icons (optional)

Notes: People often need some concrete suggestions and encouragement to get started, but once they begin, it will be hard to get them to stop!



# 4•6 mapping tools

Group Size: 5 - 25

Time: 45 minutes

Materials: large sheets of paper, and colored pencils, crayons, or markers

Notes: Be sure there are no globes or global maps in the room. Be aware that people will have different values and observations and different understandings of various continents and countries. All are valid! The variation makes for a rich and interesting map.

Global mapping with children, often results in wonderfully creative abstract views of the world in the shape of animals or symbols like hearts or flowers.

### **Global Mental Map**

### Create the Maps - 30 minutes

Draw the world as you know it in your head—as you see and experience it. You may include continents, oceans, major rivers and lakes, the poles, etc. Do not use any reference material when drawing your map; draw only what you can on your own.

On the map, draw symbols showing what meanings certain regions or specific places have for you.

### **Discussion - 15 minutes**

How do you see your world?

What continent or country is at the centre of your map?

What does this tell you about your perspective on other regions?

Which areas were you unsure about? Why?

Show your map to someone else (or another group). Have them interpret what your map might say about your perspective on the world.

### Extensions

Indigenous and colonial maps are excellent discussion tools for an exploration of world-view and knowledge.

Putting a globe or a world map upside down and asking if it is accurate is another great way to discuss the significance of who makes the map (i.e. northerners made the world map, so the north is on top).

mapping tools  $4 \cdot 7$ 

NEIGHBOURHOOD

NOW

HAT'S Y

MAT

HERE'S YOUR

### **Community Asset and Vision Mapping**

This is a generic workshop format used for local or neighborhood mapping events for 5-30 people. It may take 2 hours: one hour for groups of 4-6 people to answer the questions and another hour for presentation and discussion.

Materials: large table-size planning map, color dots to place on sites, post-it notes for site descriptions, paper to draw out your favorite places, coloured markers, eager neighbors



Visions for change *"For all the poor people [to] have* food and a house and warm things to wear!" Jenna, age 10, grade 5

### **Community Mapping** Introduction

Why Community Mapping? Give a simple overview of community mapping focusing on the connections between Assets. Values and Visions.

#### **Goals of Exercise:**

- have fun and be creative
- meet your neighbors and remember their names
- identify community assets and opportunity sites
- vision together and discuss the "what if?" possibilities

#### **Rules:**

Listen as much as you talk!

#### Map Each Site

- Every dot is numbered and the site information to match it put on each post-it note - MUST have the corresponding number on it too!
- Identify each Site with a colored dot
- Write the same number on a post-it note
- Describe the site on the post-it note

#### **Group Exercise**

- A Mapping Ourselves: Who are We and What Do We Love Best about our Community?
  - About You! Introduce yourself to the group and mark with a dot where you live and with a post-it note your name (and address/email - if you like)
  - Your Favorite Place Locate and describe a favorite place to one another or take a bigger piece of paper and draw your favorite place and put that along the sides of the map.

### **B** Mapping our Common Treasures: What and Where are Our **Community Treasures?**

- Locate the Assets (using the dots and post-it notes) \*Blue and Green Assets (Sites, Routes, and Spaces)
- Arts and Culture Assets, Social Assets (and services), Commercial, Economic Development Assets
- C Mapping Our Visions from Assets to Opportunities What and Where are Our Visions for Change? How Can We Improve Our **Community?** 
  - Identify opportunity sites from the above categories and describe them on the green post-it notes. (This could be a future development idea, a vacant lot, a service that does not exist and should, a cleanup area, a health clinic, a wharf, a community garden, a bakery, a new greenway or bike path, a swimming pool...!)

# 4•8 mapping tools

### **Green Mapmaking Process**

The following is the basic outline for creating a Green Map, adaptable to many environments and groups.

### **1. Getting Started**

Start by choosing an area to explore. Draw or study a map showing landmarks of your local built environment, including streets, parks and gardens. Discuss your target audience (neighbors, tourists, other students and schools) and goals for your Green Map. Where/how will your map be displayed and/or distributed when completed?

50

8

### 2. Choosing the Icons

Review the Icon sheet with your group. Which icons do you want to highlight? Will you focus only on positive sites (parks, gardens) or include "blight" sites, such as toxic areas. You might want to begin by looking at things such as cultural and historic places, recycling and reuse sites, community and city gardens, wildlife habitats, transportation facilities, and businesses that are environmentally friendly.

### 3. Investigating and Recording Green Sites in Your Neighborhood

Form small Mapmaking teams and begin to investigate your community, environmental site, or neighborhood. While you are in the field, use notebooks or index cards to keep track of the category, name and, location of each green site, no matter how large or small. If possible, students should write a few sentences describing special features of the community, make sketches or take photos. You can make notes on noises and smells or other general impressions about the health and physical beauty of an area. You can also gather information/opinions from local residents, shopkeepers, etc. about important ecological and cultural sites in your area. Check bulletin boards for information on events and meetings that can help you discover special greening initiatives in your community.

### 4. About Toxic Hot Spots

Most communities contain some threats to the health and safety of the natural environment. As you tour the neighborhood, make note of the category and location of each toxic hot spot. You may need to get advice from a local environmental group or government organization to find these polluted places. You might wish to write an article about the toxic sites for the school or community paper, suggesting actions to address pollution in your community. How can you use your Green Map to identify areas in your neighborhood that require special government or public attention?

### 5. Completing Your List of Sites

Members of your investigation teams should share lists of sites with your class and community. Which sites do you think are most important? Your teams should decide which of the Icons describe the sites best (more than one is OK). Are there any categories of sites that you missed? Do you need more research? Should more recreational or cultural places be included? Are you ready to compile a final list?

### 6. Organizing the Green Sites

Organize your list of green sites by type of site and also by location and size. If possible, transfer the collected information into a computer. Enter information in a standard format (or a database) to make it easier to use



## mapping tools 4.9

Thentles

(and add to later). Some sites can best be described using two or more lcons. You can even make up a new site category and create its visual symbol, if the lcons provided do not describe all the special places you found.

### 7. Making Your Map

If you have not already done so, draft your map by tracing a base map or by drawing a diagram of your area that fits the size of your paper. Be sure to credit the source of the base map, which may be a road map, a city planning map, etc. Use a copy machine or tracing paper to create a draft map. When all you sites have been listed and identified on your draft, and numbered in a logical order, copy or trace over it to create a clean finished Green Map.

Consider different formats for presentation of the information you have gathered -- should you type or hand-write the text? If possible, use colors and design elements that will enhance the map but will also reproduce well. Clarify your map's geographic boundaries so people seeing it for the first time will understand how your neighborhood has been defined.

Leave room for a Legend, which is a listing that defines each lcon and tells users how to read your Green Map. It might be easiest to number each lcon on the map and then put a numerical list (with or without detailed explanations) on the side. You can also create a logo for your map and give it a special name (or use the Green Map System logo). Please also include: an arrow pointing north, the "scale" of the map, the date of creation, a list of members of the mapmaking team, and important sources of information for your map, including your base map.

### 8. Map Formats

You can print copies on paper to share, in the form of a folding map, postcard, or poster (ask a local printer for help, or print on a copy machine if available (adding color highlights by hand, if you like). Your map, regardless of how it was created, can probably be scanned into a computer and posted on the Internet. The Green Map System, the school computer lab, or a local business may be able to help accomplish this. On the internet, your map can reach a large audience around the world.

### 9. Telling Your Story

Send or deliver printed Green Maps or your web-based map's address to friends, relatives, neighbors, decisionmakers, and newspapers. Include a press release, photos, essays, poems, or other background information about your project. Hold an event to publicize your map's completion, such as a tour, presentation, or party. Please let Green Map System hear about the ways you found to publicize your findings, and we promise to share your ideas among the expanding, global network of mapmakers. Send in a copy of your map, photos of your work in progress, etc.

### 10. Evaluate Your Map

Draw some conclusions from the work you have done. What new things have you learned about the place where you live? What was your favorite part about making the Green Map? Do you have plans to revise or update your Green Map? In what ways could a revised map be improved or strengthened in terms of its design and public display? What have you concluded about the things that you can do to make your community a healthier, more attractive place to live?

# 4.10 mapping tools

## **Community Green Mapmaking**

Here are some steps to help you plan out your community or green mapmaking project.

### Aims

#### Why are we doing this work?

- · Promote & discover
- · Share & participate
- Learn & educate
- · Individual reasons: what are yours?
- Example: Promote citizen pride and involvement.

### 2 Questions

#### Why do we seek to learn or show?

- · What specifically do you wish to learn?
- . Who is the information for?
- Example: What are the assets of my neighbourhood?

### 3 Needs

#### What do we need to answer our questions? Information

- Base or background data (streets, parks, etc.). Likely they already exist and you can request them.
- Focus information (sites & features of interest). This is what you'll likely need to collect. Example: locations of services and green spaces.

Resources

.Funding, time, involvement

### Renewal

- Fresh questions
- Fresh information
- · Fresh energy
- · Plan next edition!

# 7 Sharing

#### How can we get our map(s)

- read and seen? · Get back to your contacts and participants
- · Publicity
- · Launch! Distribute! · Collect feedback and
- assess outcomes

## 4 Outreach

How can we involve our community in pooling knowledge? Example

#### **Basic Toolkit**

- · Basemap of region
- Pre-numbered stickers
- · Sticky notes
- · Pens
- Instructions
- Put sticker on map to identify site
- · write number from sticker on sticky note including site information (name, description etc.)

### 5 Compiling

How can we pull together our findings?

- · Make a table of your results
- · Plot them on a fesh basemap
- . Use icons (e.g., Green Map System Icons) for site type and importance (e.g., most often selected)
- · Additional research and fact checking

| iD. | Name                                 | Category/Icon       | Description                   | Count |
|-----|--------------------------------------|---------------------|-------------------------------|-------|
| 1   | Michigan Street.<br>Community Galden | Community<br>Garden | cob toorshed, wheelchair beds | 4     |
| 2   | Community Project                    | Health Care         | drop-in direc                 | 2     |
| 8   |                                      |                     |                               |       |
| 4   |                                      |                     |                               |       |



6 Products

#### How can we illustrate our findings?

· Basic or artistic?

· Size: wall map?

· Run: one copy? Many?

· Accessed digitally?

composition · Review of draft by community

· Editing for clarity and

· Hand or computer diment?

· Leafet?

# mapping tools $4 \cdot 11$

### **Green Map Workshop Samples**

### Cuba

Mapa Verde Cuba is organized as a National Network. This effort has promoted the interchange of ideas and the feedback of experiences, making spaces for dialogue, debate and education. Inside the Network itself, Mapa Verde Cuba presents several kinds of workshops.

### **Methodology Workshops**

These are for first time users. During the development of these workshops, the participants develop a methodology for mapmaking through videodebate, presentations of first hand experiences and team work.

### **Educational/Training Workshops**

These workshops ensure the ongoing education and training of Network members. They are carried out by acknowledged specialists. The thematic workshops are held on request by the members or by the team coordinator.

### **Interchange Workshops**

Each team reviews their experiences, new icon proposals, objectives and goals. Different strategies are discussed for the continuity of the team's mapping work. Some of them are ideal ways to keep the group's unity strong. The presentations of the experiences in these workshops have been the key to the success and spread of Mapa Verde in Cuba.

### **Regional Workshops**

Potential and registered Green Mapmakers attend these workshops. The objective is to promote the interchange between groups from various geographical areas and allow them to evaluate the results. These workshops also promote the creativity, participation and common integration needed for social and environmental change. The teamcoordinator designs each workshop according to the audience's needs. The evaluations made in previous workshops have provided Mapa Verde Cuba with guidelines and strategies for further actions.

Another way to spark interaction between the different participants is through direct consultation with members and/or specialists, organizations, institutions, etc.

#### Different participatory techniques include:

*Presentation:* To create a trusting and friendly environment. *Liveliness:* To promote different activities resulting in positive change. *Team work:* To encourage the community to work around a common issue. *Evaluation:* At the end, the participants provide their feedback anonymously about the activities.

The video "To Map A Dream" is shown and discussed in the workshops.

MAPA



Cuban Mapa Verde participants

by Liana Bidart Cisnernos, Mapa Verde Cuba coordinator

# 4•12 mapping tools

### Japan

### **Green Map Kids**

A Japanese workshop program for elementary school students

*Icon Kits:* Green Map Icons were made into a flip card book, and kids were encouraged to walk round their city with them.

**Field Work:** Kids pair up and head off to discover various sights of the city. Once a sight is discovered, the pair uses an icon to identify the spot. One kid holds the lcon card, and the other takes a photo, which includes both the site and the lcon held by the partner. This is how the sites are documented. By participating in this fieldwork, kids dissect and capture the best pieces of the city in which they live.

**Documentation:** Once the fieldwork is over, kids paste the photographs into their notebooks. Underneath each photo, kids are free to write (or draw) about their choices of sites and loons. This is an individual project, and each participant gets to complete and take home his/her own Green Map Notebook.

**Group Map:** We provide a large map where kids fill in the sites they discovered (by attaching an Icon and a picture) creating one big Green Map! We produce both a collective Green Map and personal documentation of the fieldwork, which everyone can take home.

We consider our Green Map Workshop as treasure hunting, archiving, and an opportunity to exchange the perspectives of the adults and youth; all on the stage of our community and urban environment.

#### 2dk.net/TAJ/greenmap

by Yohei Yasuda, Atsuko Shimizu, Soji Tominaga, Wakana Hinata, Mariko Horikawa, Haruna Igarashin, Green Map Japan



photos: Green Map Japan

ほうないろるの支持を主たしてみました。

## mapping tools 4•13

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(11

### **Designing Maps**

The following are some suggestions for designing your Community or Green Map.

### **Map Components**

If you would like, add one or several of these simple map components to make it easier for other people to read the map.

### Title

Make a name for your map that includes the place and a tagline that summarizes what is represented on it.

### Direction

If you have determined in which direction the sun rises and in which it sets, you already know the orientation of the cardinal directions: south, north, east and west. Mark the direction of sunrise as east and sunset as west. With east on the left and west on the right you will have south facing up between them (north does not necessarily have to be on top of the page!). Create a small compass rose or directional arrow to show your maps orientation. It could even artfully reflect your community.

### Legend

If you have been using symbols to draw the various features on your map, insert a small box (legend) on your map in which you interpret them for your reader.

### Scale

The basic point of the scale is to let the reader know the size of the object that is being represented on the map. Find something on your map for which you can guess the size, such as a table (1.5m long), or a house (15m wide). Note that an adult of average height makes about two casually paced steps to a meter. Make a line representing that distance at the bottom of your page and note its real length underneath it. Now you have a scale.

### **Production Information**

Put your name(s) and the date on the map and any other sources used—Voila!

LEYENDA Alechilicos Longeros Riego de Caides \* Annero Solo D Curlo de Abrelos Solis de Genero Fisico Aucas para decapacidadas Cartanisación Aciedas 

### Legend

### **Community Highlights**

| 10 | Greenspaces and<br>Recreation           |
|----|---|
| Ŭ  | Cultural and Heritage<br>Sites          |
| 50 | Organizations and<br>Community Services |
| -  |   |

Health and Wellness Resources

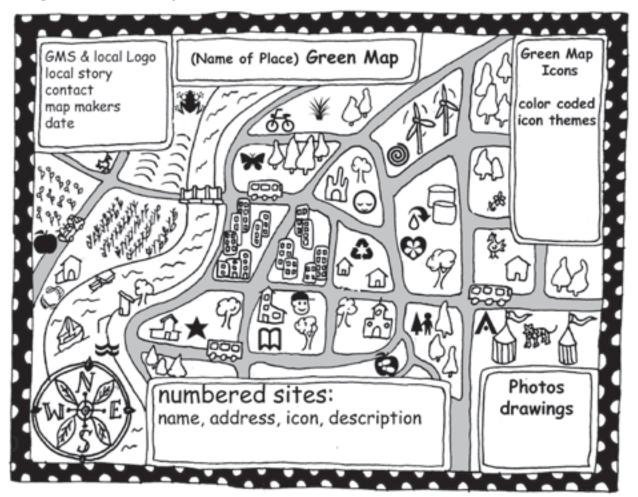
Note: Numbers on the icons refer to descriptions on the back of the map

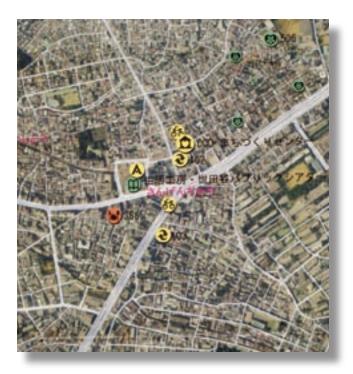




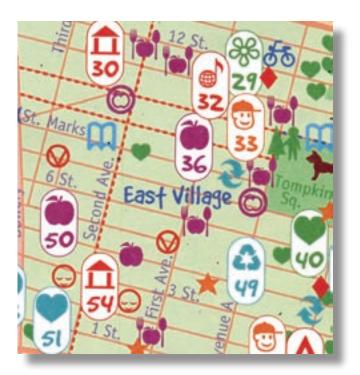
# 4•14 mapping tools

Things to include on your Green Map:





Setagaya, Japan Green Map (aerial photo basemap)



LoMap, NYC, USA Green Map (youth oriented)

# mapping tools $4 \cdot 15$

### **Design Questions for Green Mappers**

There are many different and engaging ways to compose your Green Map, once you have researched the area you are charting. It is a good idea to consider these questions very early in the process, so the desired outcome can frame your process. You do not need to follow them in order, but if you devote a workshop session to considering them, it will help set the stage for a successful mapmaking experience.

### Who is going to use this Map?

Are they mostly longtime community residents, newcomers, or tourists? Are they students, senior citizens, or others? What map format will reach and motivate your audience - printed copies or a web-based map? One large poster map for the community center or a mural? Or a combination?

### What about the Map's "look and feel"?

Should it have a colorful and fanciful design or simply be factual? Does it need pictures or other graphics besides the map? You might want to compare a selection of existing maps and decide together what would be most effective for your intended users (as well as your budget for publication). Consider hand-drawn vs. computerized design, and using collage, sketches, photos, and inset maps. How will it fold?

# What kinds of ecological and cultural sites are important for the intended users to know about?

Start by making a list of sites, then review to see if you are focusing attention on the full range of sites and resources you want to include. Should the map be comprehensive (with everything) or include several lcons or just a few?

### What are the boundaries of the map?

Official town boundaries, your bioregion, your neighborhood, a meandering bike tour route, thematic maps - what will tell your story best and fit well on the sheet, too? What navigation cues are needed?

### What should stand out on your map?

What is the key information, the overall concept, and the message the map is to convey? Who will write text and/or create graphic and photographic images? Who will take care of outreach, fundraising, design, production, and distribution/marketing? All these elements are part of Green Mapmaking.

### Where will the base map come from?

From an existing map, or a GIS application, or will you draw your own? Successful Green Maps have used all of these formats.



Victoria, BC, Canada Green Map (incorporates indigenous and colonial names)



Okazaki, Japan Green Map (culture and traditions focus)

# 4•16 mapping tools

# How do you look for information about Green Map sites?

Consider direct observation, research in books or online, surveys of residents, involving an expert in the project, and other inquiries. Record the data about each on a field report, file card, or database.

# How do you make all the elements of the map work well together?

Balance images, outlines, background, and dimensions to create an inviting map. Use the five elements of design: color, pattern, line, texture, and shape. Share sketch maps to select the best direction for the final project. Select environmentally-sound mapmaking materials, including recycled paper, nontoxic markers and glues.

### How well does the map communicate to the reader?

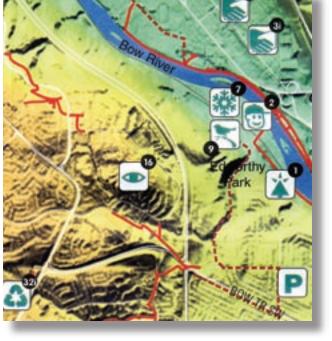
Plan time for writing narratives and editing site descriptions, making a clear layout, legibility (tiny print is harder for youth and seniors to read), languages (should the legend include multiple languages?). Do not forget to proofread and double-check all details.

# How can you make the map project extend into the future?

Make sure your Green Map is placed where people can see it, and ask for feedback. Plan for future updates and corrections. What is next? Should new themes or areas be charted? Will you join several workshop or successive semester maps into one big image?

Hillside Hillside Fieldstate Hillside Hill

Victoria, BC, Canada Neighborhood Green Map (health focus)



Calgary, Canada Green Map (digital terrain basemap)



Victoria Falls, Zimbabwe Green Map (conservation focus)

by Green Map System

# Community Mapping and Technology

### Geographic Information Systems (GIS) Are They For You?

Geographic Information Systems (GIS) are computer-based systems for storing, updating, and presenting geographic information.

If you are familiar with other types of computer programs, it might help to think of a GIS as a combination of two things: a drawing program (to keep track of the geometries of features) and a spreadsheet or database (to keep track of other information about features, often called their "attributes").

Say you are interested in streams. The drawing part of the program will record the shape of the streams. And then the spreadsheet part can keep track of other information on each stream-like its name and width. The key thing is that there is a one-to-one relationship here - for each stream geometry there is one matching record in the database.

What is special about this? Nothing earth shattering. But it does make it possible to explore, display, and analyze spatial information in various ways.

Want to label your streams with their names? No problem, the GIS can look up the names for each in the attribute table and display it next to the line for the stream. Want to show different streams differently based on their width? Again, easily done, since a GIS can grab the width information from the attribute table and use it to draw the stream lines wider or narrower accordingly.

Or maybe you are concerned about stream pollution. You can get a hold of some other datasets - abandoned mines, for example - and then run analyses about how they interact with your streams. An analysis might look like: "find all the segments of streams wider than 2 meters that are within 150 meters of an abandoned mine". So now you know where to go collect water samples to test for pollution. From abstract datasets you can sometimes quickly reach concrete actions and decisions.

But it assumes a lot of work and effort - learning the software, getting existing datasets, and collecting and entering your own data. In many cases, you would be better off just doing a quick bit of mapping by hand.

GIS is worth considering when you are entering into a long-term project, when you want to have your data in a form that can be edited and maintained on an ongoing basis, and when you have access to the expertise and resources you need to get going.

Not so long ago getting into GIS meant spending thousands of dollars on expensive programs. Not any more. New "open source" software applications are emerging that are not only free but also (reasonably) user friendly. They range from desktop mapping programs to online systems used to put interactive maps on websites.

#### Want more information?

Look for the online guides and tutorials in the Resources section of the Common Ground website.

#### www.commonground project.ca

These guides introduce GIS and cartography concepts and approaches in layperson's terms, and point you to data sources and software.

# 4•18 mapping tools

### Free Software for Community Mapping

The good news: there are whole families of mapping software that are both powerful and free. Free not only in price but also in philosophy the "open source" philosophy of creative collaboration, rather than competitive commercialism. The proviso: free mapping software is not always the easiest to use, though this is improving.

A full mapping solution likely needs a few different components. You need to store data, in some form of data file or database. You need to be able to look at, explore, and edit geographic information through a mapping client. And, potentially, you might want to serve up information from a website, through a web service.

One thing to keep in mind is that there is an increasing body of publicly available data, some of which you can access in map format. Web Map Services (WMSs, one of the standards defined by the Open Geospatial Consortium) lets users anywhere fetch specific map images from online servers. So, using some of this free software, you can get background maps from existing sources showing things like roads, parks, and so on, and then focus your mapping work on just the information you are interested in.

But, there is a bit of a learning curve here. Just getting started? If you are using a Windows computer, you could try the "gratis" (no charge—but not "free" in the wider sense) mapping software DIVA GIS, a good program for getting used to mapping concepts, and – rare in gratis mapping software – it includes the ability to create data as well as viewing it. DIVA GIS also comes with some useful documentation for getting started (though some of it will not mean much unless you happen to be interested in plant distributions, the software's special focus).

Once you are comfortable with the basics you can try free software programs mentioned here.

There is a ways to go yet before mapping places a computer is as quick and easy as writing email, but with standards and free software in place, it may be only a matter of time...

> by Nedjo Rogers Common Ground and GroundWorks Learning Centre

Green Map System was developed in the "open source" tradition! Your ideas, lessons learned, and other contributions are always welcome. Here is a list of the most promising open source software. All of them can be freely downloaded and installed. To find them, do a web search for their names.

Spatial database: Try MySQL 4.1, or, if you are feeling ambitious, PostGIS.

Mapping client for viewing and editing map information: Udig (desktop software—needs a fairly powerful computer) or Community Mapbuilder (for web-based mapping).

Online map serving: Mapserver or GeoServer. Both these require a "dedicated server" (a computer connected to the internet with special software loaded).

Or try maps.google.com !

BC

from www.diva-gis.org

<sup>3 ACCENE TO DIVA-GIS Functions,</sup>

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# mapping tools 4•19

### Indonesia Community Mapping and Appropriate Technology in Indonesia

### From GIS to CIS – Community Information Systems

The community information systems research project was initiated to explore how rural communities could best represent and communicate information about themselves and their relationship to their traditional lands, as well as assess how this information helps to inform decision-makers of community perspectives, issues and aspirations.

Community Information Systems are digital map-based multimedia information systems, in which the traditional knowledge of the communities was gathered using digital video, digital photos and written text, stored on a computer and managed and communicated using an interactive map. The process involved facilitating community decision-making processes relating to shaping the project and deciding what information to record, training community members in the use of the equipment for information gathering, and actual information editing and management. Both communities documented current and historical information about their culture, land uses, management practices, and significant events in their villages.

The community information systems project was developed in partnership with two rural Dayak Indigenous communities in East Kalimantan, Indonesia. This project was based in the Spatial Sciences Laboratories in the Geography Department at UVic. Other project collaborators included the Konsorsium Sistem Hutan Kerakyatan, Kalimantan Timur (SHK-

KalTim), an Indonesian based Non-Governmental Organisation (NGO), and the Centre for International Forestry Research (CIFOR). The project was funded by the CGIAR-Canada Linkage Fund (CCLF), established by the Canadian International Development Agency (CIDA). The project ran from 1998 until 2002.

> by Dr. Jon Corbett UBC Okanagan, BC, Canada



You introduce a mapping technology and the first thing you change is the power structure because those who like and control the technology suddenly get in power. They control the technology but the technology controls what you capture. Technology begins to shape your vision of the land. I am actually making a circular argument where you can argue that society shapes value, value shapes the research and development agenda, which again shapes values; and you are going round and round.

Dr. Peter Keller University of Victoria, 2001

Indonesian CIS interactive mapmakers

# 4•20 mapping tools

### Global Connections Mapping our Common Future

The community and Green Mapping movement is growing worldwide, in parallel with the community participation for sustainable futures movement. Social movements for human rights and democracy have always relied on engaging popular participation and education methods such as popular theatre, art, and community mapping. Today - worldwide, indigenous peoples continue to use maps to reclaim territory, conservationists to chart habitat and ecosystem change, while inner city neighborhoods and barrios use mapping to advocate for affordable housing, environmental clean up, and local services.

The global movement for "localization" was endorsed in 1992 at the United Nations Rio Conference on the Environment and built on in the second Johannesburg Conference on the Environment in 2002 and profiled in their Agenda 21 (see www.un.org/esa/sustdev/documents/agenda21) Agenda 21 is the U.N. plan for global sustainability for the 21st century. As part of this, Agenda 21 supports the development of holistic, engaging, locally based, development processes such as community mapping that increase community capacity for sustainability planning.

There are a multitude of international networks and resources to share and spread the community mapping, participatory planning, and localization movements. Below are some with great examples, toolkits, and network connections. (More in Resource section  $p.5 \cdot 1$ )

www.iapad.org Integrated Approachs to Participatory Development urbanhabitat.org/node/920 Participatory community planning www.nativemaps.org Indigenous mapping www.shim.bc.ca Conservation mapping www.epa.gov/epaoswer/osw/kids/index.htm Environmental Protection Agency (EPA) climate change youth activities www.commonenergy.org Canadian university-led movement for climate change action

### **United Nations**

### **Rio Declaration on Environment** and Development, 1992

#### **Principle 1**

The Fuller Projection Dymaxion map www.bfi.org

Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

### **Principle 21**

The creativity, ideals and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all.

### **Principle 22**

Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

### **Common Ground, Green Map, and Mapas Verdes**

Common Ground continues to work on locally-based community learning and planning projects and produced their Community Green Map of Victoria and Region in 2004. They are also part of the International Advisory of the Green Map System. Common Ground learned soon after beginning their mapping work in Victoria in 1998 that worldwide there were many other mapping projects such as bioregional mapping pioneered by Doug Aberley, community resource mapping in many indigenous communities, and the worldwide Green Map System based in New York. Common Ground attempts to tell some of these stories in this booklet.

In December 2002, 22 Green Mapmakers from 14 countries around the world met in Bellagio, Italy including Common Ground. The Meeting led to many fruitful discussions and project ideas, including the decision to create the Green Map Atlas, the development of a European hub and support for the development of the Americas Mapas Verdes Project.

The Mapas Verdes Americas Team met in Cuba in July 2004 and continue to work together to:

- Document low-to-high tech mapping methodologies and processes, develop appropriate learning resources (e.g. this booklet) and share exemplary stories from different regions of the Americas to inspire existing and new projects.
- Bridge community and Green Map processes, people, and projects in the Americas.
- Strengthen North-South dialogue on, and partnerships for, community, professional, and academic sectors involved and interested in community and Green Mapping.

Mapas Verdes guiding values are:

- Participation
- · Direct action for sustainability
- Community planning
- Doing more with less
- Localization over Globalization

The Mapas Verdes Americas Project network's coordination is shared by three members. The coordinators are Liana Bidart Cisneros from Cuba (mapaverde@cfv.org.cu), Maeve Lydon from Canada (info@gworks.ca) and Beth Ferguson (metamorphosisarte@gmail. com) from the USA.

Supporters are listed on the inside cover.

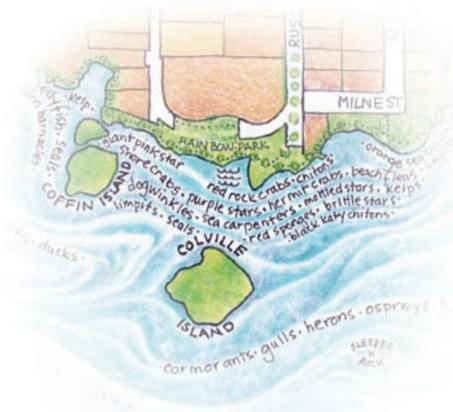


Painting a community Green Map mural Proyecto Comunitario Muraleando, La Habana, Cuba



Mapas Verdes Americas at work.

# 4•22 mapping tools



From the base map for the Victoria West Community Green Map, Canada

by Jane Baigent

# **Mapping Resources**

### Web Sites

**Aboriginal Mapping Network** 

#### www.nativemaps.org

Examples, stories and connections to mapping in over 100 indigenous communities. Managed by EcoTrust Canada.

### **American Planning Association**

### www.planning.org

Connections to learning resources and participatory projects on planning.

### **Artistic Community Mapping**

#### www.landtrustalliance.bc.ca/research.html

Maps and background information on an extensive community mapping initiative undertaken in various islands between Vancouver Island and the Mainland of British Columbia (including the Gulf Islands).

### **Asset Based Development Institute**

#### www.northwestern.edu/ipr/abcd.html

ABCD was established in 1995 by the Community Development Program at Northwestern University's Institute for Policy Research, based on three decades of capacity-building community development research by John Kretzmann and John L. McKnight.

### **Canadian Mapping Resources**

#### www.nrcan.gc.ca

Extensive information, data, and links to map resources and sustainability initiatives for educators, researchers, community developers and the public – coordinated by Natural Resources Canada.

### Common Ground Community Mapping Project

### www.commongroundproject.ca

Information, articles, and links on community-based mapping and links to related education, planning, and sustainable development projects and groups. Common Ground also uses open-source GIS software for community mapping.

### **Common Ground UK**

#### www.commonground.org.uk

Stories of the parish community mapping projects in Great Britain including profiles of community restoration and art projects.

### **Community - Conservation Mapping Network**

#### www.shim.bc.ca

Profiles, stories, maps, tools, and links to natural resource conservation mapping projects – coordinated by Department of Fisheries and Oceans Canada.

### **Community Economic Development**

### http://www.ccednet-rcdec.ca/

Promotes and supports community economic development for the social, economic and environmental betterment of communitiesCommunity Mapping - Social exclusion and food systems

#### www.sustainweb.org/publications

#### www.cmap.info/webmapping/default.asp

#### **Eco-Trust Canada**

#### www.ecotrustcan.org

Information on sustainable community resource management, including community mapping.

### **Environmental Youth Alliance**

#### www.eya.ca

Information on community action for the environment and youth asset mapping workbook.

### **Green Map System**

#### www.greenmap.org

Find linked descriptions to every Green Map project worldwide, and learn about leading a citywide or youth project. Includes Icon posters in several languages and links to the Green Map Atlas, regional hub websites, and related resources.

#### www.greenmap.org/youth

Find several education related resources, including university-level Green Map and research projects. The FAQ is a handy resource!

# 5•2 mapping resources

#### **Multi-lingual Resources**

Looking for resources in different languages? Check the homepage at www.greenmap.org. Click to find an overview and a 'navigator' that collects everything in that language on the website – maps, blogs, articles, hubs, tools – on one handy page!

#### Institute for Connectivity in the Americas

#### www.icamericas.net

The Institute for Connectivity in the Americas (ICA) emerged from the 2001 Summit of the Americas. It is the forum for hemispheric innovation in the application of information and communication technologies (ICTs) to strengthen democracy, create prosperity, and realize human potential. Sponsored by IDRC Canada.

#### Integrated Approaches to Participatory Development

#### www.iapad.org

Participatory 3-D mapping and methodologies for local development based on case studies in the Philippines.

#### **Kids and Community Planning**

#### www.planning.org/kidsandcommunity

Information for educators and students to discover and design the local community through innovative planning exercises including mapping.

London 21 Sustainability Network – London Green Map Pack

#### greenmap.london21.org/

Step by step resource for green mapmaking and field work in cities and neighborhoods.

### **Public Participation GIS (PPGIS)**

#### www.ppgis.net

An open forum on Participatory Geographic Information Systems and Technologies used in participatory settings to support integrated conservation and development, sustainable natural resource management and customary property rights in developing countries and First Nations.

### **Sustainable Urban Neighbourhoods**

#### www.urbed.co.uk

Ten design principles for designing a sustainable urban neighbourhood. Extensive information on urban sustainability.

#### **Resources Zine**

#### www.planning.org/resourceszine

Online resources for teaching and involving youth in planning.

### **Publishers**

### **Community Asset Mapping**

#### Acta Publications

www.northwestern.edu/IPR/abcd.html

### Community and Community Economic Development

### **Centre for Community Enterprise**

www.cedworks.com

### **Community and Social Transformation**

**New Society Publishers** 

www.newsociety.com

### **International Planning and Change**

**Institute of Development Studies** 

#### www.ids.ac.uk/ids/bookshop

International Development and Research Centre www.idrc.ca

### Community and Global Planning and Participation

**Earthscan Publications** 

www.earthscan.co.uk

## mapping resources $5 \cdot 3$

### **Key Resources**

Aberley, Douglas. *Boundaries of Home: Mapping for Local Empowerment*, New Society Press, 1993.

Cisneros, Liana Bidart et al. *Mapa Verde, una Mirada al Desarollo Local*, Publicaciones Acuario, Centro Felix Varela, Havana, 2004 ISBN 959-7071-27-4

Elliott, Charles. *The Saltwater People's Map*, Saanich Indian School Board, 1996.

Freire, Paolo. *Pedagogy of the Oppressed*, Continuum Press, 1986.

Green Map System. *Green Map Atlas*, available for purchase as a download, a printed book and a CD-Rom (in English and Japanese) www.GreenAtlas.org (volume one)

Green Map Japan, *Green Map Activity Guide*, 44 pages in Japanese or English, 2005. Available at the Green Map online store. www.greenmap.org

Guntze, Jeff. Mapping the Future. Green Map and Common Ground in *Punk Planet*, Issue 67, May-June 2005. www.punkplanet.com

Harley, J.B. and D. Woodward, eds. (1987). *The History of Cartography, Vol. 1.* University of Chicago Press, Chicago.

Harrington, Sheila. *Giving the Land a Voice: Mapping Our Home Places*, Saltspring Island Community Service Society, (second Edition) 1999.

Kretzmann, John and McKnight, John. *Building Communities From the Inside Out: A Path Toward Finding and Mobilizing a Community's Assets*, ACTA Publications, 1993.

Lydon, Maeve. Community Mapping: The Recovery and Discovery of Our Common Ground Geomatica, Vol. 57, No.2, 2003, pp.131 to 143

Lydon, Maeve. Finding Our Way Home, *Alternatives*, Fall 2000. (also on Common Ground web site)

McRae, Janet. *Community Mapping: Creating a Sense of Place*, Green Teacher, No.55, pp. 37-39.

Mason, Adrienne. Mapping Home, *Canadian Geographic*, Sept/Oct 98, pp. 58-62.

Monmonier, Mark. *How to Lie With Maps*, The University of Chicago Press, 1996.

Penn, Briony. *Mapping the Last Blank Space*, Orion, Winter 97/98, pp. 20-24.

Sobel, David. *Mapping From the Inside Out*, Orion, Winter 97/98, pp. 14-19.

Sobel, David. Map-making and Childhood. Sense of *Place Education for the Elementary Years*, Heinemann Press, 1998.

Society of Wilderness, *Energetic Green Map Movement*, 135 pages in Traditional Chinese, 2005. ISBN 986805922-4. Available at the Green Map online store. www.greenmap.org

Turnbull, D. 1989. *Maps are Territories, Science is an Atlas*. Chicago: University of Chicago Press.

Wates, Nick. *The Community Planning Handbook*, Earthscan Publications, London, 2000.

Young, Karen Romano. Small Worlds, Maps and Mapmakers, Scholastic Inc. New York, 2002 ISBN 0-439-09545-X

### Videos

### **Maps With Teeth**

This video profiles bioregional mapping by locals that communicate a sense of place and regional identity. 26 minutes color video for Grade Level: 7-12, College, Adult. Copyright Date: 1997 ISBN (VHS): 1-56029-700-Directed by Peg Campbell Produced by Heather MacAndrew & David Springbett Asterisk Productions

### Cuban Mapa Verde Video

### Documentary Gotica a Gotica (Drop by Drop)

A wonderful Green Map video has been produced by Centro Félix Varela and filmed by Ana Margarita Moreno. It incorporates an earlier film, A Mapear un Sueño (To Map a Dream) and highlights community action with stories of mapping experiences & transformations.

In Spanish with English subtitles, this video is part of the Green Map Media Anthology 2007 DVD that includes Gotica y Gotica, Green Trailblazers (India 2004), Seeds of a Global Movement (NYC 2007), Tokyo Yamanote Green Map (Japan 2002) and 3 slideshows produced in 2007 by Green Map System.

For more about Cuba and other map stories, check the Resource section's Map Stories page at GreenMap.org.

And don't forget to explore the great, locally-written profiles in the Map section, too. Each project has a unique story and many have contributed map views, photos, articles, and more! It's the place to be inspired.



Lino-cut by Beth Ferguson

# mapping stories $5 \cdot 5$

