

charting the way to vibrant communities

2004年 第1号  
volume one 2004



# GREEN MAP ATLAS

MAPMAKING STORIES ASIA & NORTH AMERICA • アジア & 北米編



**JAKARTA** INDONESIA

**PUNE** INDIA

**HIROSHIMA** JAPAN

**ROBESON COUNTY** USA

**KYOTO** JAPAN

**TOKYO** JAPAN

**NEW YORK CITY** USA

**HAKODATE** JAPAN

**MILWAUKEE** USA

**TORONTO** CANADA



# Green Map Atlas

Mapmaking Stories · Volume One

www.greenatlas.org

in Japanese at www.greenatlas.org/jp



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Dedicated to promoting sustainability and citizen action in communities around the world through locally-created maps of the natural and cultural environment, Green Map System is a non-profit 501c3 organization. Tax deductible donations are welcome and will benefit Atlas Volume Two and our other community media projects worldwide.

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Atlas I 



## Volume One · Production Credits

An international team collaboratively developed this Atlas, meeting first at our Cape Cod “summit” in August 2003. With resources from each author and advice from the Atlas Task Force (formed at 2002’s Global Green Mapmakers Meeting) our Working Group then produced this multimedia publication.

## Atlas Working Group\*:

Dominica Williamson · design director/Cornwall UK  
Wendy E. Brawer · project manager/GMS founding director/NYC  
Asako Kondo · information & web designer/GMS  
Alice Hartley · editor/GMS  
Rick Conroy · technology programmer  
Matthew Groshek · information designer/Milwaukee  
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Masahiro Horiuchi · project coordinator in Japan/Tokyo  
Takashi Hojo · technical manager in Japan/Kyoto  
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Chine Hayashi · Japanese-English translator  
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Justin Lafontaine · distribution advisor/Toronto  
Kana Hashimoto · production assistant/GMS  
\*city name = Mapmaker

See last page for author bios. Refer to online Atlas Credits for GMS Board members, Atlas advisors and summit participants.

## Atlas Supporters:

- Japan-US Community Education and Exchange, in conjunction with Nippon Foundation
- Japan Foundation Center for Global Partnership (New York)
- Gaea Foundation – Cape Cod Residency
- Rockefeller Foundation – Bellagio Residency

This multimedia publication is available as downloadable PDFs, printed books and on CD-ROM, in English and Japanese. Every effort has been made to facilitate translation and local printing and dissemination. We encourage you to make printed or digital copies of this Atlas, as described on page V. Local re-publishers of Green Map Atlas books and CD-ROMs, and periodicals, books and websites that wish to reproduce the Atlas, in whole or in part, must refer to the [legal](#) page at [www.greenatlas.org](http://www.greenatlas.org) or contact us directly for permission.

Our deep and sincere gratitude goes to Tennen Design Forum and the scores of local project partners, team members and others who collaborated in producing the Atlas. Special thanks to Buckminster Fuller Institute and VTP for pinpointing each featured Atlas community on our cover. Fuller Projection © 2002 Buckminster Fuller Institute and Jim Knighton. We appreciate using the high-resolution scans made for Hiroshima’s 2003 Green Map exhibit by Hiroshima Xerox.

The Green Map Atlas was created with Adobe Creative Suite using the Émigré font Tarzana. Read more about the choices made in the Atlas’ online [Colophon](#).

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Mapmaking Stories · Volume One

[www.greenatlas.org](http://www.greenatlas.org)






















We present these Green Mapmaking Stories in south to north order, lending fresh global balance. Each Story has been given a letter and within each, find this consistent format:

Cover	
Introduction	1
Mapmaking	2
Teamwork	3
Economics	4
Assessment	5
Conclusion	6
Back Cover/Credits	

You can click directly to each Story from this Table of Contents. To return to this page at any time, click the small Atlas logo in the lower corner. You can navigate to different pages using your arrow keys. All website references are hotlinked throughout.

Along with many other Atlas resources, on [www.greenatlas.org](http://www.greenatlas.org) you will find Atlas PDFs in two formats:

- 72 dpi for on-screen viewing
- 150 dpi for printing

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## Welcome to the Green Map Atlas

Mapmaking Stories · Volume One!



Introducing truly inspiring stories behind the creation of Green Maps, this vibrant Atlas reveals diverse approaches to promoting sustainable communities. In Volume One, Green Map System proudly presents ten exceptional Stories from Asia and North America, the first regions of the world to be spotlighted in this series.

More than just Green Maps, the Atlas brings you voices of local leaders and portraits of each community's unique mapmaking efforts, their motivations, methodologies, key sites and outcomes. You can enjoy this beautifully illustrated PDF anthology by viewing it on your computer screen, printing it to read like a traditional book, making displays and sharing it by email with friends and colleagues. We encourage you to keep and enjoy the entire 88 page Green Map Atlas.

Our objective is to help cultivate healthier hometowns everywhere, and we hope these Stories offer inspiration for yours!

**“A Green Map gives you back the city – not in someone else’s sterile view, but as a riotous living tapestry of human activity.”**

– Tom Stafford, *The Ecologist*, UK

This volume is the debut of the multimedia Green Map Atlas series. With the release of high-resolution English and Japanese CD-ROMs in mid-2004, quality Atlas books become printable on demand, anywhere in the world. All Green Mapmakers are provided with copies so they can produce Green Map Atlases locally—an eco-smart approach to publishing that expands our reach and helps support each local map. Over time, Atlas volumes featuring other languages, world regions and themes (such as youth or waterways mapping) will follow, using the open philosophy and template designed for this first volume.

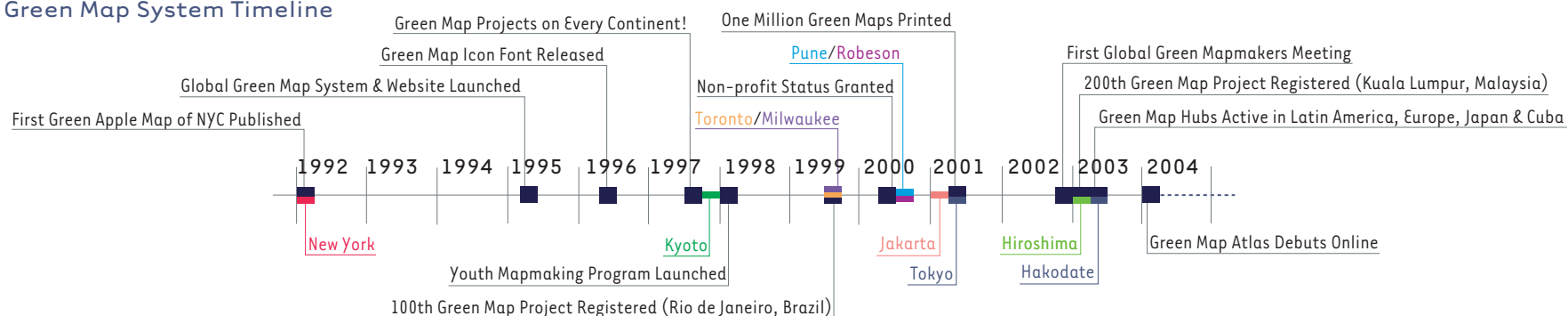
Our dream of creating an Atlas took root at 2002’s Global Green Mapmakers Meeting. Instead of a conventional book of maps, we opted to profile map creation and community impacts from a regional perspective.

We discussed our concept with recent grantor Japan-US Community Education and Exchange and thanks to them, Japan Foundation and ten dedicated Mapmakers, Volume One focuses on these Asian and North American communities:

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



## Green Map System Timeline



When the Green Map Atlas expanded into a multimedia “eBook” publication, its potential to reach and impact communities instantly multiplied. The Atlas is innovative in several ways:

- Showcasing the mapmaking process, along with the resulting Green Maps
- Illustrating key sites and practicalities to spur related projects
- Encouraging ecologically-sound, decentralized distribution
- Harmonizing local and global goals
- Encouraging public responses to help shape the project’s future

The Atlas is great reading for students, journalists, city planners, community leaders, funders, tourists, map and media enthusiasts, grassroots activists and global citizens — share your copy today!

Explore the Green Map Atlas and [www.greenatlas.org](http://www.greenatlas.org)’s resources. Then, help the project evolve by telling us what you think — we’ll be looking to you to help shape and support this project’s future!

### On the Green Map Atlas website, you will find:

Donation Information  
 Feedback Survey and Reader Responses  
 Links to the Atlas in Japanese  
 Tools for Sharing the Atlas and Media Resources  
 Complete Credits and Colophon  
 Green Map Store — get the Atlas and your choice of available Green Maps

### Since 1995, Green Map System has worked to:

- help citizens of all ages identify, promote and link their communities’ ecological and cultural resources
- build inclusive networks that extend civic participation and accelerate progress toward sustainability
- promote model greening efforts underway across the globe
- use the info-web in service of the web-of-life
- celebrate the beauty, brilliance and diversity of Nature, while making our hometowns better, healthier places

Each locally-created Green Map is a fresh perspective encouraging discovery, personal involvement and greener everyday choices through a shared visual language of Green Map Icons. Project funding can be derived from several sources, but all Mapmakers pledge that content is not influenced by sponsors and to do their best to be accurate, fair and inclusive.

**Our worldwide movement puts hope on the map.** Green Map System’s network includes over 250 locally led projects in 42 countries. More than 175 different Green Maps have been published.

**On [www.greenmap.org](http://www.greenmap.org), home of the Green Map System:** discover links to every Green Map project in the world, Green Map Icon posters in several languages, youth mapmaking tools and an invitation to participate in this community sustainability movement.

# Using the Atlas

Mapmaking Stories · Volume One

[www.greenatlas.org](http://www.greenatlas.org)

The Green Map Atlas can be downloaded in two formats:



72 dpi: view on-screen, display and share by email  
150 dpi: print books or create exhibits

Follow the color coded directions here, and find answers to many questions and other presentation resources online at [www.greenatlas.org](http://www.greenatlas.org)

Share the Atlas freely, in the “gift economy” tradition. We ask you for two gifts in return:

- Give us your feedback by mail, email or via our online [survey](#)
- Make a [donation](#) to help support the next Green Map Atlas volume and GMS projects worldwide

Thank you for responding in the spirit of this exchange!

If you plan to make more than 6 copies, refer to our online Re-Publication [Guidelines](#) and contact us in advance. For high-resolution Atlas CD-ROMs\*, printed Atlas books, featured Green Maps and more, visit our online [Store](#) or contact a Green Mapmaker in your region of the world.

\*The quality of 150 dpi prints will be good. For the very best results, print from the 300 dpi (dots per inch) Atlas CD-ROM.



72dpi  
for VIEWING  
ON-SCREEN

## Viewing on Your Screen

After opening PDF with Adobe Acrobat Reader 5 or higher, click “Control L” for a full screen view. Click again to restore scroll bars and desktop (Mac: “apple L”).



Use the magnifier to zoom in on details.

## Full Screen View



**ctrl + L**

Use a digital projector to directly display the Atlas PDFs, or import Stories into your presentation for a classroom, conference or community gathering.



## Sharing by Email

You are welcome to send the Atlas to your friends and colleagues! Send one Story at a time, unless you know the recipient has a high-speed connection. Please do not deconstruct; send only complete PDFs.



150dpi  
for PRINTING

## Printing Your Copy

The Atlas fits on either A4 or US letter-size paper (recycled, of course!). Color printing is best, or keep it simple with black and white. Our design purposely minimizes toner use to conserve resources and your printer, too. Select “landscape” (horizontal) in your printer’s settings. Print on both sides of the sheet (duplex), whenever possible. Test your printer first — you may need to print the Even pages first, then turn the stack over and print the Odd pages.

## Binding

Print a double sided copy and make sure all the pages are in order (including Atlas cover pages). Then, bind along the left side. 1.5 cm (1/2 inch) from the edge, you can:

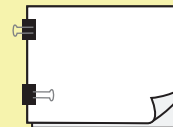
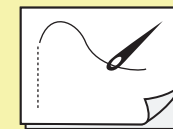
- punch small holes and sew together
- use 3 to 5 staples
- use brads or binder clips
- use a copy shop’s binding service
- bind with a strip of cardboard ([download](#) and print the optional spine).

Once bound, your Atlas will become sturdy enough to stand up in a bookcase, be read over and over, and last a long time.



We encourage your creative and **ecological approaches** to binding the Atlas — please share your best ideas with us. Email: [atlas@greenmap.org](mailto:atlas@greenmap.org)

Consider making a copy for your local library!



## Exhibiting the Atlas

The Atlas can be printed out, mounted and exhibited, so several people can view a single copy. You may want to obtain copies of the featured Green Maps to display, too. Tell us about your exhibit and we will list it with other Atlas events online.

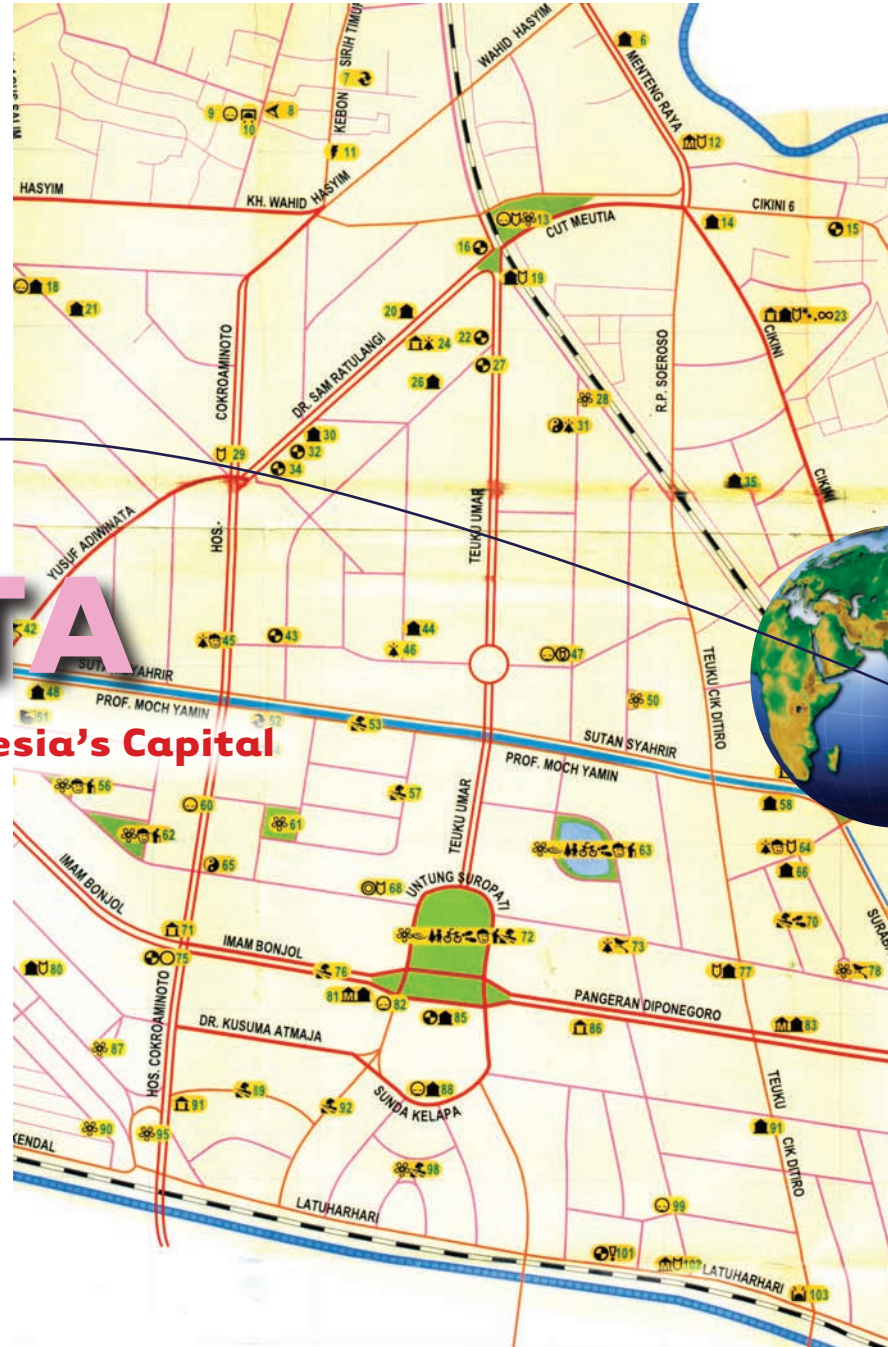


# JAKARTA

Green Mapmaking in Indonesia's Capital



A project of the **Green Map System**: promoting sustainability and citizen action in communities around the world through locally created maps of the natural and cultural environment



# Introduction

Jakarta · Indonesia  
 Jakarta Green Maps  
 www.greenmap.or.id



Detail of 3rd Map · Peta Hijau Menteng (2003)



I decided to make the Jakarta Green Map because it fulfills my long inquiry for a tool to express the relationship between nature and culture in the city.

Jakarta, along with Indonesia as a whole, has been through a number of environmental disasters—the accumulated damage of three decades of a development regime narrowly focused on growth and productivity. Consumption, in this newly independent and developing nation, has been perceived as a deserved indicator of new wealth.

Healthy urbanism and ecology, while existent as concepts in many Indonesian ethnic cultures, have been eroding. I see Green Mapmaking as a way to reveal the urban reality layer by layer, bringing back urban and environmental soundness into collective memory.

Our first targeted audience is Jakarta's middle class. As the best-educated in a country where even primary school is a

luxury for many, they are well-equipped to realize their indispensable role as agents for change. Jakarta, as the capital city, naturally has the largest proportion of the middle class in Indonesia. As the project has evolved, support has come from the media, artists, intellectuals and university students. Concern about the erosion of our cultural heritage, as well as mismanagement by the city authority, have come to balance concern for the environment.

## Map Data

- Language: Indonesian & English
- Number of Maps: 3
- Published Map Formats: Print, Website
- Number of Sites Charted: 287 points on 2nd map, 198 points on 3rd map
- Number of Global Icons Used: 72



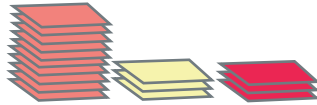
Three of Jakarta's seven local icons





# Mapmaking

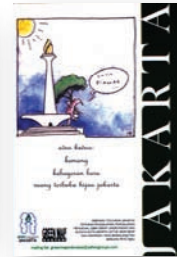
Jakarta · Indonesia  
Jakarta Green Maps  
www.greenmap.or.id



10,000 copies printed 1st map (as centrefold in *Aikon* magazine), 3,000 2nd map, 3,000 3rd map

Our first Green Map, charting the Kemang neighbourhood, was published in the centrefold of *Aikon* magazine. *Aikon* was the only magazine focused on environmental and cultural issues among the urban middle class, which made it the best way to distribute the map among its targeted audience. The magazine was published on recycled paper for eight years before it ceased production in October 2002.

We intend to create the Jakarta Green Map neighbourhood by neighbourhood, involving new groups of volunteers for each project. This explains the different appearance of each of the three maps published to date. The process begins with a briefing about the icons. Then volunteers go out to survey the neighbourhood, identifying sites that contribute to the city's environmental and cultural life, and sometimes initiating lively discussions with site owners or inhabitants. Unique, locally specific sites are also accommodated. For example, for the Menteng Green Map,



(left to right)  
1st Map · **Peta Hijau Kemang** (Kemang Green Map): February 2002  
2nd Map · **Peta Hijau Jakarta** (Jakarta Green Map): December 2002  
3rd Map · **Peta Hijau Menteng** (Menteng Green Map): October 2003  
Children eagerly trying out the Menteng Green Map

we charted residences of important cultural figures—songwriters, batik makers, a founding father of the republic, leading intellectuals. Sometimes it is hard to select among available GMS Icons; however, having a certain degree of discipline helps maintain the map's quality and universality.

In 2002 we moved our secretariat to the non-profit office of the Indonesian Association of Kite Fliers. The published maps are sold there and at AKSARA bookstore, which donates their retail space. Our website [www.greenmap.or.id](http://www.greenmap.or.id) is shared with other Indonesian Green Maps. It is under construction by colleagues in Malang, an East Java city that recently started its own Green Map project.

## Technical Data

### Software:

Adobe Illustrator  
QuarkXpress  
CoreDRAW

### Hardware:

Power Macintosh G4 workstation  
HP Scanjet 3c

### Paper:

First map: duplicator 80g, recycled  
Second map: matted paper 120g

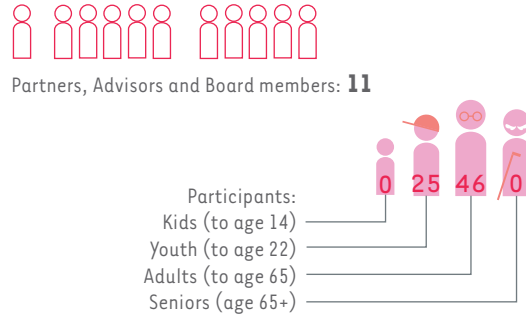
### Map Structure:

Folding

- First map: 47.4 X 30.8 cm / 18.7 X 12.1 in
- Second map: A2 (59.4 X 42 cm / 23.4 X 16.5 in)
- Third map: A2 (59.4 X 42 cm / 23.4 X 16.5 in)

# Teamwork

Jakarta · Indonesia  
**Jakarta Green Maps**  
[www.greenmap.or.id](http://www.greenmap.or.id)



We work with different people for each edition, though there is always a text editor and a graphic designer. The first and second maps involved a core group of volunteers, plus others who helped identify and discuss the sites. The core group included myself—Marco Kusumawijaya (Team Leader), AS Ningsih (Project Coordinator), Ukke Kosasih (Text Editor), Enrico Halim and Bobby Irandita (Graphic Designers), Joni Faisal, Heni Wulandari and Nila Sari (Researchers).

The third map's group included myself, Ludi Hasibuan (Project Coordinator), Ati Kamil (Text Editor), Heni Wulandari and Ria Butar-butar (Volunteer Coordinator/Secretariat), Yan Priyatna (Graphic Designer), and Joni Faisal and Hendri Soendoro (Researchers). Most volunteers are young professionals, fresh graduates, and students of journalism, architecture, urban planning, graphic and landscape design, heritage conservation and art. Stakeholders have expressed their wish that Green Maps lead to follow-up action, informing the public and authorities about

problems in the city. We therefore have included short articles by authoritative experts explaining problems such as endangered historical features, encroachment upon green spaces, and violation of environmental laws.

We use our collection of Green Maps from all over the world constantly in discussions, workshops and launch events—they inspire not only us, the Mapmakers, but also the general public. We are trying to meet the demand for a more detailed and colourful Jakarta Green Map, with higher quality printing, given all the constraints.

Each map is also supported by relevant organizations. Goethe Institut, for example, has helped the Menteng map by providing space for volunteer gatherings and sponsoring the launch evening. This active cultural centre, located within Menteng with an ancient *ficus elastica* tree in its yard, has two icons on the map.



<< Twenty Green Maps from around the world were exhibited in Gallery Lawang at the University of Tarumanagara



Students and lecturers >> who attended the exhibition also participated in a workshop



Elementary schoolchildren at Nichiren Syosyu Buddhism Centre get ready to explore Menteng neighbourhood using the Jakarta Green Map



<< We held the 2nd map launch at a bookshop/internet cafe suited to our target audience



Menteng Green Map >> team members blow up icon balloons for a Goethe Institut exhibition





# Economics

Jakarta · Indonesia  
Jakarta Green Maps  
www.greenmap.or.id

The first Green Map was greatly supported by *Aikon* magazine, which donated the time of five staff for six months. Later funding came from the World Bank's Small Grant Programme, for printing and travel to workshops. However, most hours have been voluntary, with one paid staff person working halftime beginning in March 2003.

For us, the benefit is in helping people to learn about Jakarta, and also to apply pressure to authorities. The map is a platform for many people who have offered information, expressed concerns or just conveyed their interest. It is a very useful tool. Recently, sales have produced some proceeds, but hardly enough to cover all costs. I have personally spent about US\$30 per month and six hours per week on the Green Map. We are thinking hard about how to sell more maps to sustain the project. We are hoping that better content and attractive design, plus media exposure, will increase demand. We are also looking for more "exotic" places to chart, to reach out and to cross-subsidize other maps.



Approximately 756 website visitors per year

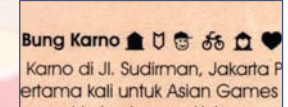


(upper, lower) Positive press coverage in the online edition of the *Jakarta Post*, 7 November 03. The Menteng Green Map press release, as shown on the website Jaringan Pelestarian Pusaka Indonesia



Green Map Icons, as shown on Jakarta's third and second maps

These icons are the common currency of all Green Maps



## Economic Data

**Type of Organization:** Network of NGOs, cultural institutes, artists, individuals

**Support:** Grants, in-kind, sales, private funding

### Major Project Supporters:

*Aikon* magazine  
Society for Built Environment  
Goethe Institut Jakarta  
Ms. Sari Madjid  
World Bank Small Grant Programme

### Number of Paid or Volunteer Jobs

**Created:** 3, combination of paid and voluntary

**Cost of Map:** Rupiah 5,000 (US\$0.60) for the 2nd map. Rupiah 10,000 (US\$1.20) for the 3rd map

**Spin Off Projects:** Exhibits

# Assessment

Jakarta · Indonesia  
 Jakarta Green Maps  
[www.greenmap.or.id](http://www.greenmap.or.id)



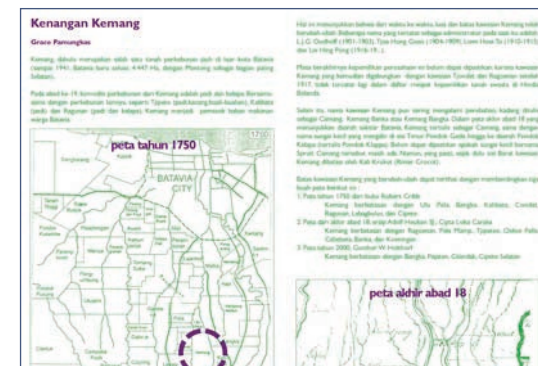
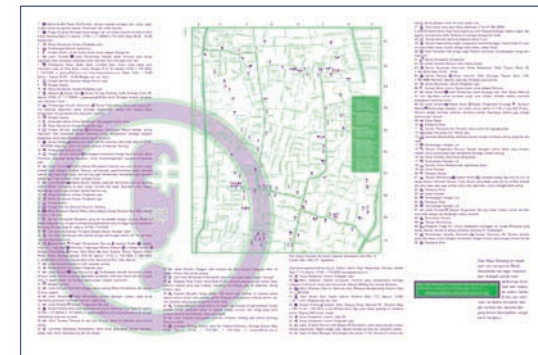
Jakarta Green Map has been covered by *Bobo* (August 02) and *Tempo* (February 03); *Aikon* published our 1st Green Map, of Kemang, in their "Slow Down" issue (February 02); Exhibition publicity poster; Front cover of the *Aikon* centrefold map

The project's greatest challenge is balancing the growing expenditure of time and effort with financial proceeds. Initially we have managed with a loosely organized network of volunteers, but the growth we are experiencing seems to require a more structured organization. Volunteers need to be managed well; they come and go with different motivations, so having a paid core group is a must.

In our context, the Green Maps are firstly valued for their documentary role. Being part of a global network is a major factor that attracts people; most are surprised and inspired to know there are many others at work on the issues. Jakarta Green Maps have inspired other Indonesian cities, including Yogyakarta and Malang. Others such as Bandung, Surabaya, and Medan have invited us to give workshops. We have begun to map Bukittinggi, Sumatera to make its hidden values known, and so that other places may be inspired to resist careless developments. Our Green Map has just started to attract the attention

of the United Nations Development Programme's environmental capacity building programme, and was used for building mapmaking and related skills with student drop-outs from a self-built, low-income residential area.

While we lack a methodology to systematically assess our impacts in Jakarta, we have had positive comments and very good media coverage. The public is invited to get involved through email listservs and workshops (mostly in universities). We have been covered by about a dozen major media outlets in the last two years, including: *Tempo*, *Koran Tempo*, *Kompas*, *The Jakarta Post* (in English), *Jakarta Shimbun* (Japanese newspaper), *Femina* and *Herworld* (women's magazines), *Bobo* (children's magazine), *Intisari*, TransTV, and Radio 68H, JakNews Radio, Radio Female and Radio ER/Ethnic Radio.



(upper, lower) The first Jakarta Green Map, of Kemang neighbourhood, and a detail from its back cover

## Conclusion

Jakarta · Indonesia  
Jakarta Green Maps  
www.greenmap.or.id

Our maps are unique because each is different, reflecting the skills and knowledge available among the volunteers. Also distinctive is its process of charting neighbourhood-by-neighbourhood, with each Green Map containing some specific local information and narratives by authoritative experts. My favourite part of the project is discovering something unexpected every time—it is the discovery process that enlightens us!

In the near future, we will focus on sales and other promotional activities for the maps. We need more bookstores, tourism boards and other partners to help generate the demand to sustain our Green Mapmaking activities. After a couple more neighbourhood maps, I hope to begin creating an overall Green Map of Jakarta. In the meantime, I would like to work with interesting places outside Jakarta, such as Ubud in Bali. Besides promoting Green Mapmaking in those regions, they are interesting and popular enough that sales

***“I immediately feel like jumping on a bike to explore the neighbourhood and visit the sites, as you are showing me the map!”***

– Vivi Zabkie, radio journalist

of their maps could support our other Green Mapmaking efforts.

***“I want to take my little children along to follow the map’s guidance; but can you guarantee that the good things you recorded in it will still be there when we get there?”***

– Mia Amalia, scriptwriter

***“The map is never good/complete enough; as a resident of this neighbourhood (Menteng), I know there is always something more to add.”***

– Hadi Purnomo, filmmaker



An open front veranda naturally regulates the microclimate in an original Menteng house, and shows the open lifestyle of the past



A small park in Menteng actively maintained by the neighbours' association



Illegal waste dumping on the River Ciliwung, the most important waterway in the heart of Jakarta, goes apparently unattended





(left to right) Mosque in the Menteng neighbourhood, noted in the 3rd Jakarta Green Map; The mountains to the south of Jakarta, as seen on a rare clear morning. Few inhabitants see this landscape, which is visible only 5 or 6 times a year. © Marco Kusumawijaya



## Credits

### Jakarta's Story written by:

Marco Kusumawijaya  
Jakarta Green Map Makers  
Kompleks Carina Sayang II  
Blok A, No. 12A  
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mobile: +62 (0)816811563

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### All Other Photos by:

Marco Kusumawijaya, except  
page 5) top, from left: Ludi Hasibuan, © Bobo Magazine; Agus Hidayat, © Tempo Magazine; © Aikon Magazine, far right: Enrico Halim, © Aikon Magazine



<< Some of the volunteers behind the Menteng Green Map

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[www.greenmap.org](http://www.greenmap.org) is your global link to every local Green Map project, multilingual Icon posters, an invitation to participate, and more.



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# PUNE

Green Mapmaking in India's Hilly City



A project of the **Green Map System**: promoting sustainability and citizen action in communities around the world through locally created maps of the natural and cultural environment



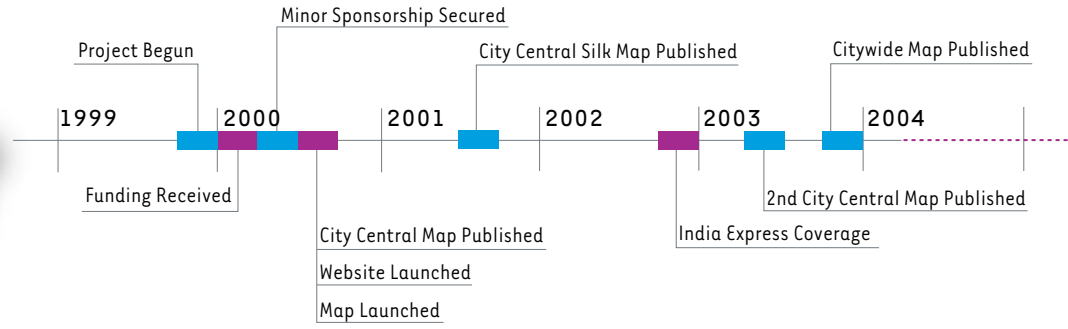


# Introduction

Pune · Maharashtra · India  
 Green Map of Pune  
 www.anandupalekar.com



Detail of the Green Map of Pune (2003)



“In the beginning there was only darkness, and suddenly there was the light of a thousand suns” - *Bhagwat Geeta*. And that was really so – at least when it came to documenting the assets of Pune City!

A city enveloped by the lush green hills of the Deccan Plateau in western India, 160 km east of Mumbai (Bombay), Pune is a certified Metropolis of over 3 million inhabitants. Formerly the summer capital of British rulers, Pune is the second largest city in Maharashtra State, currently boasting more than 50% of state offices. It is best known as the education capital of India, thanks to various high quality institutions hosted here. The International Marathon and National Ganesh Festival held in Pune are now world famous.

I am an architect, diversified into Geographical Information Systems. While surfing the high tides of the Net for map data downloads in 1999, I bumped into the friendly site of the Green Map System.

There was an invitation to make your own Green Map, with no age bar or educational prerequisite! GMS even offered to supply their legendary icons. I admired the concept of creating a simple document to record all the assets that made a city unique, steering future development policy towards greater sustainability.

## Map Data

- Language: English
- Number of Map Editions: 3
- Published Map Formats: Artpaper, Handmade paper, Silk
- Number of Sites Charted: 130
- Number of Global Icons Used: 18



Four of Pune's five local icons





# Mapmaking

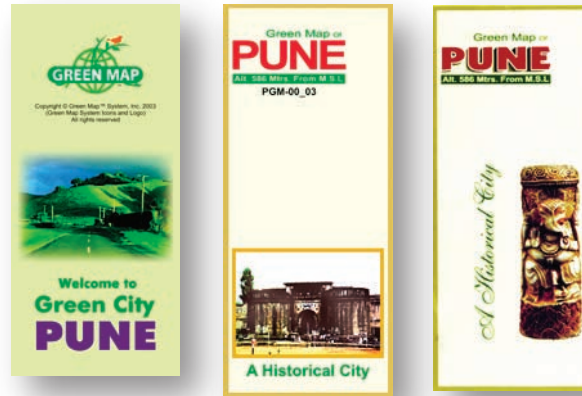
Pune · Maharashtra · India  
Green Map of Pune  
www.anandupalekar.com

  
1,000 maps printed on paper  
(200 on handmade paper, 100 on silk)

With mapmaking, the real fun began. The Survey of India had a 1962 map, which several individuals had updated. The base map we selected was kindly made available by the late Mr. S P Barve, creator of the map "Pune A to Z" (Parshuram Press). We verified our version against the Municipal Map and made sure that truth prevailed.

It occurred then that city assets were of many types: important personalities, roads, the hills and twin river system, colonial and pre-colonial structures, cave temples. Architectural hallmarks alone represented a spectrum of 1200 years. We decided to list everything that had been there since my childhood – the 1940s. We picked around 25 Green Map Icons and classified assets in that order.

Since Pune in the year 2000 held over two million souls spread over 150 sq.km, I had to carefully select a window to narrow our frame of reference. The ideal window was the central downtown, which is over 700 years old and a very intimate and dense



sector. The city center map shows the Old City as it existed until the 19th century. The spillover started after the British took the city in 1863, establishing military cantonments in outer areas and bridging rivers that had once limited the city.

As the project started progressing we bumped into a variety of printing sizes and technologies. Green Map System had shipped some existing maps and we could decide the document size, colour scheme and paper quality. Gradually a new world was opening up!



(left to right)  
Green Map of Pune (2003-04)  
Green Map of Central Pune (2003)  
Green Map of Central Pune (2000)  
Students review the map-in-progress before contributing site suggestions and other comments

## Technical Data

### Software:

CADIAN Arch  
Graphic SW

### Hardware:

Celeron and Pentium  
Canon SLR camera  
Bicycle  
Motorcycle

### Paper:

Handmade Paper, Maplitho 100gsm,  
Artpaper 130gsm with vegetable ink

### Map Structure:

Folding

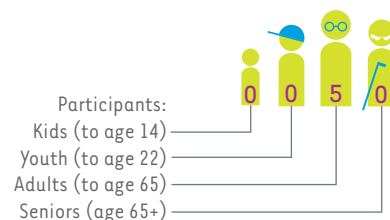
- Central & Silk maps: 54.6 X 41.9 cm /  
21.5 X 16.5 in
- Citywide map: 55.9 X 43.2 cm /  
22 X 17 in

# Teamwork

Pune · Maharashtra · India  
Green Map of Pune  
www.anandupalekar.com



Partners, Advisors and Board members: 5



Mapping my city was an interesting challenge, though at first I could not think of sharing this idea with anyone except my own office team, which was used to Computer Aided Drafting, graphic design and such skills. But as the project progressed we began to get invited to lecture and attend forums dealing with environmental issues. The map had begun taking shape in a true sense.

Soon I knew that it was beyond our single-handed capacity and had to involve more key people. Besides, everything is in abundance in India—especially people, talent and ideas. All who liked the idea and wanted to get involved were welcome. Suddenly there was action on all fronts. Building up the base map, layout and design, collecting location data, interacting with NGOs — it was quite a list. Since I had taken it upon my heart to create the Green Map, I went about meeting people and NGOs working on city issues such as heritage preservation, eco-sensitivity, hillsides

and ornithology. I also visited local handicrafts sites and included several renowned playhouses, as Pune is the cultural capital of Marathi theatre. It was eye-opening to discover these treasures by dabbling in the Green Map!

All team members had to be aware that their contributions would not be weighed on any commercial scale. They would be volunteering for a much larger cause. Most volunteers were my students, who loved being members of the team. Professionals such as Ninad Mate handled the printing. Graphic designers Anoop Chaphekar and Smita Patil were employed on a cost to cost basis.

Members of local NGOs >> contributed ideas for the map, including these staff members from the Mashal organization



<< Graphic designer Smita Patil perfects details on the 2003 edition of the Green Map of Pune



Famous physicist, feminist, writer and science policy advocate Dr. Vandana Shiva is presented with 2003 Pune Green Map by mapmaker Anand Upalekar



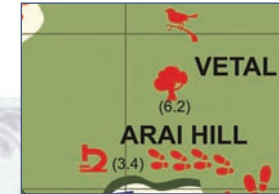
On the left, Dr. Robert Zuber, then GMS's outreach specialist, sharing some ideas with the committee during the July 2000 launch of the first Green Map of Pune

# Economics

Pune · Maharashtra · India  
**Green Map of Pune**  
[www.anandupalekar.com](http://www.anandupalekar.com)

As an architect, working out project cost was a routine exercise, but fundraising was not! For this project, I worked from my own savings rather than depend on any sponsors; they come with strings as a rule. Funding and also ease of handling fixed the map size. The total project cost for the 2000 edition was Rupees 35,000 (around US\$700) for 1000 paper copies, 200 on handmade paper and 100 on Indian silk fabric. The handmade paper uses rice husks and recycled paper pulp, and is produced in a facility about 50 km outside the city.

The idea to print on silk sprouted when I saw Mr. Barve printing digital pictures on cloth and silk. The silk Green Map would be used by ladies as a headscarf. It was an instant success and became very popular. Paper maps were kept in bookshops at a price of Rupees 15/copy (US\$0.30), although later we decided to distribute the maps free to those who wanted them.



Green Map Icons, as shown on Pune's first and second editions

These icons are the common currency of all Green Maps



## Economic Data

**Type of Organization:**  
 Architecture design group

**Support:**  
 Private funding

**Major Project Supporters:**  
 Self, Hotel Blue Diamond

**Number of Paid or Volunteer Jobs Created:** 5

**Cost of Map:** Rupees 15/copy, but many were distributed free



(upper) The website [www.anandupalekar.com](http://www.anandupalekar.com) includes the Green Map of Pune, along with other projects  
 (lower) Green Map of Pune silk headscarf  
 (background) The Green Map of Pune was printed on handmade paper made from recycled paper and rice husks



# Assessment

Pune · Maharashtra · India  
 Green Map of Pune  
 www.anandupalekar.com



(left to right) Times of India (13 Nov 02)  
 Daily Sakal (31 July 00) in the Marathi language

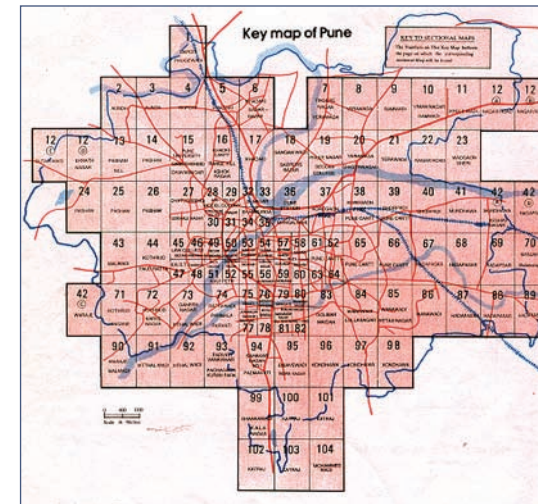
Dr. Robert Zuber of GMS was coming to town for a conference and offered to attend our map launch, so his arrival gave us an automatic deadline. A five-month timetable was set; then it was easy, cutting the operations into smaller bits of tasks. Our team was abuzz with energy and action. Ideas that had been pooling in since September 1999 were becoming reality.

Captain Ashok Deshpande, Municipal Commissioner of Pune Municipal Corporation, kindly agreed to preside over the event, which was set for the auspicious date of 27 July 2000. Robert was a great help and inspiration, checking map proofs and contributing ideas, and finally we managed the event very satisfactorily. Vijay Paranjpe (environmentalist), Dr. Prakash Gole (ornithologist), Sharad Mahajan (NGO Mashal), Prashant Waghmare (City Engineer of Pune Municipal Corporation), Arvind Kolhatkar (Ex-Chief of Mumbai Stock Exchange) and reporters from

Sakal, Indian Express, Times of India, Kesari and a local TV channel all attended.

Our launch resulted in phone calls from Indian cities like Bangalore, Mumbai, Kolhapur, Trivandrum and Nasik, wanting to know if they could create maps. Some have now made progress toward getting started. Being part of the global GMS network, with access to universal icons, provided me with a greatly elevated platform and the much-needed awe element!

In late 2003, Dr. Vandana Shiva visited Pune to deliver a lecture, and afterward I presented her with our Green Map in both the latest and the Year 2000 edition. She was aware of GMS and said "If you want any creative action performed — Pune is one such city."



(upper, lower) India Express (14 Nov 02) showing Anand Upalekar and the first draft map. "Pune A to Z" by Mr. S.P. Barve is the base map used for the Green Map of Pune

## Conclusion

Pune · Maharashtra · India  
Green Map of Pune  
www.anandupalekar.com

Like a horoscope—showing the planets' locations and their beneficial and malevolent aspects—the map showed Pune's true facets. The idea of recording the sustainable spirit of a city on a cartographic backdrop was new to everyone, but now there are several special purpose projects including a heritage map and a tree map.

Eventually, we decided to make a second Green Map in 2002–03 after the Municipal Corporation acquired 18 outlying villages, expanding Pune from 150 sq.km to 250 sq.km. All 423 schools in Pune will receive copies so that the young generation can know their real city, perhaps shaping their ideologies and futures.

My favourite gain has been discovering my own city's rich treasures of assets. I hope others who share this map and follow its trails will enjoy them equally deeply. Policymakers for one—if they keep their eyes and spirits open—will know how to respect our vast cultural wealth in making the future City Development Plan.

***“It is the only map covering the city from the viewpoint of eco-tourism. Since it is made with the help of citizens it provides an insight into city life and culture.”***

– Parth Lawate, Tekdi Group

***“I am very pleased that you are making an effort to map gardens, objects and buildings of great importance. The map is the face of our city.”***

– Mr. Prashant Waghmare, City Engineer, Pune Municipal Corporation

***“Map-based Information Systems are a must for every city, particularly when urban centers are expanding and becoming complex. For environmental students and tourists, the Green Map is of great use.”***

–Sharad Mahajan, planner and chief, NGO Mashal



**A** Brass pots, common household vessels, are made and beautified by brass smiths

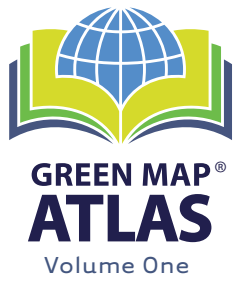


Prince Aga Khan donated this building as the Kasturba Gandhi Memorial. It marks the site where Gandhi was kept under house arrest and where his wife died



(left to right) A traditional craft shop selling handmade multi colored glass bangle bracelets, which were originally imported from Rome in the 4th century AD. At the worship flower market, hundreds of flower sellers are arranged along the footpath





(left to right) Historic Pune University's main office is the former Viceroys' mansion  
Breathe deep the mountain air along an exhilarating walk through Pune's green hills

# Credits

**Pune's Story written by:**  
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 India  
 tel: +91 (20)256-5802

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<< Mr. Sudhakar Joshi, owner of Utkarsh Book Agency, holds one of the Green Maps for sale in his shop

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 Pune-411016, INDIA. Tel: 91-20-2565802  
 e-mail: upalekar@pn2.vsnl.net.in

Green Map is part of the award winning global Green Map System. Find out about the world wide collection of local green maps, & the GMS icons and maps at our web site "www.greenmap.org"  
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 All right reserved. e-mail: info@greenmap.org

**GREEN MAP SYSTEM**  
 Green Map System™  
 Green Map Icon™ Copyright

**PARKS & STADIUMS**

Address	Area
1. Ashokrao Uppalkar Park	140
2. Ashokrao Uppalkar Park	140
3. Ashokrao Uppalkar Park	140
4. Ashokrao Uppalkar Park	140
5. Ashokrao Uppalkar Park	140
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24. Ashokrao Uppalkar Park	140
25. Ashokrao Uppalkar Park	140

## GREEN MAP OF CENTRAL PUNE, MAHARASHTRA, INDIA

July 2000

The locations shown in this map are merely schematic & not to scale  
 This map is for private circulation

The creation of this map was co-sponsored by:  
 Hotel Blue Diamond - 6125500  
 Architect Anand Upalekar - 9671705  
 Yashu Enterprises Landscape Consultants - 9690704  
 s-designer Graphics Firm - 9422191

**ICON LIST**

- Farmers market
- ♻️ Water recycling
- ♻️ Composting
- 🏛️ Cultural site
- 🏛️ Museum/Institution
- 🎨 Art spot
- 👶 Child friendly eco-site
- 👴 Senior friendly site
- 🎓 Environmental school
- 🔬 Scientific/research
- 🌳 Public forest
- 🌸 Garden
- 🌿 Community garden
- 🌊 Marine habitats
- 🦒 Zoo & wildlife center
- 🌊 River and water front park
- 💧 Drinking water source
- 🚶 Best walks
- 🌿 Eco-spiritual site
- 🗑️ Flyover Zone
- 🐦 Bird & Wildlife Watching Site
- 🏨 Hotel
- 🏥 Hospital

Citywide view of the newly expanded city of Pune (2003)

**Want These Maps?**

email to [upalekar@pn2.vsnl.net.in](mailto:upalekar@pn2.vsnl.net.in)  
 or visit the online store at [www.greenatlas.org](http://www.greenatlas.org)

[www.greenmap.org](http://www.greenmap.org) is your global link to every local Green Map project, multilingual Icon posters, an invitation to participate, and more.

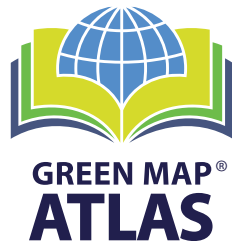
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[info@greenmap.org](mailto:info@greenmap.org)



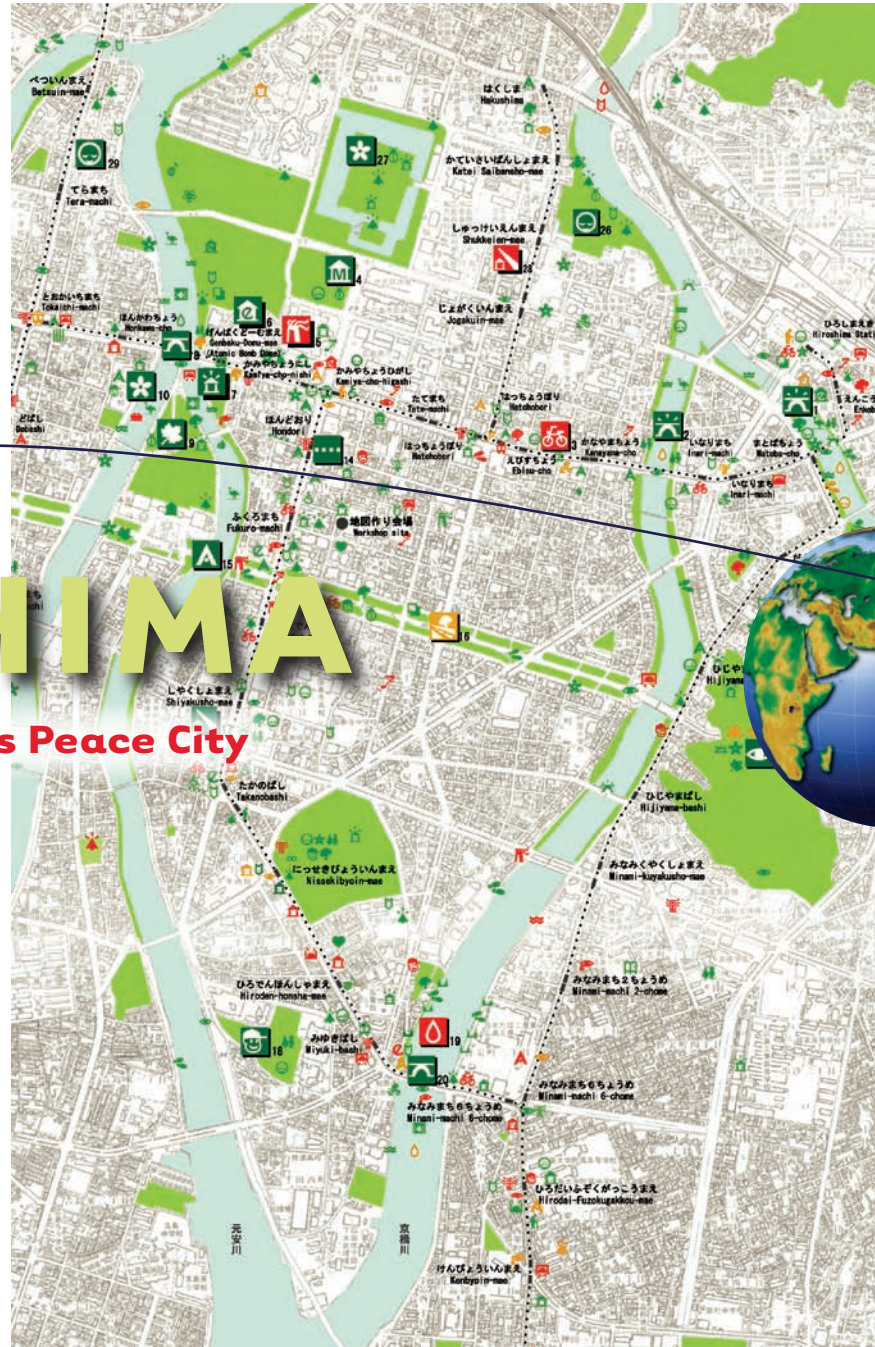


# HIROSHIMA

Green Mapmaking in Japan's Peace City

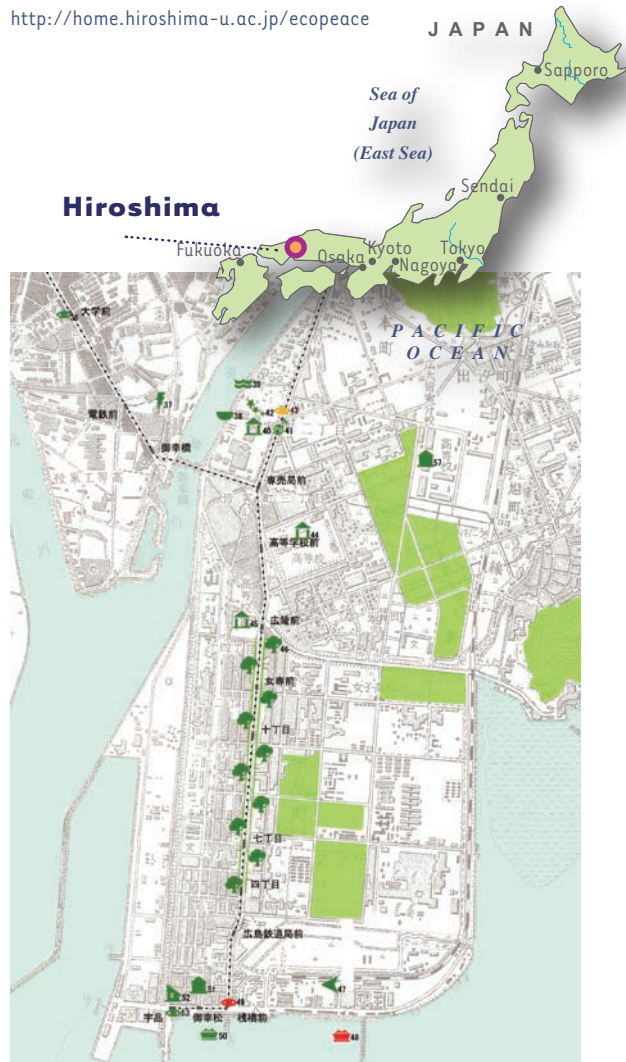


A project of the **Green Map System**: promoting sustainability and citizen action in communities around the world through locally created maps of the natural and cultural environment

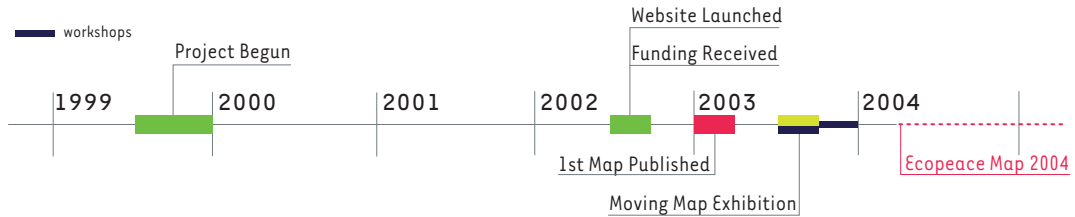


# Introduction

Hiroshima · Japan  
 Hiroshima Ecopeace Map  
<http://home.hiroshima-u.ac.jp/ecopeace>



Detail of the Hiroshima Ecopeace Map (Historical edition)



The Hiroshima Ecopeace Map project was created to let citizens show how they cherish and love the city, and to advocate for urban development that connects the city's past and future. Through the process of mapmaking, we have discovered places that reveal the extraordinary characteristics of this unique and vibrant city.

Making the Hiroshima Ecopeace Map involves everyone from children to the elderly. It not only enhances participants' sensitivity towards the local environment, nature and history, it also fosters a global sensibility. Hopefully, the Ecopeace Map will promote a new vision of the future, starting with the "Peace City" of Hiroshima.

In order to have a peaceful world, it is essential for us to never wage war on others; however, today the future of the human race is uncertain and worrisome. This is why we must overcome differences and have a broader discussion on peace.

Throwing away whatever becomes useless is no longer a perspective suitable for this vision of the future. Instead, we thought of re-approaching Hiroshima from the perspective of reuse and conservation. As a starting point, why not make a map based on sites visible from Hiroshima's old and new form of transportation, our beloved tram! The tram is a perfect vehicle for the age of global ecology. Let's make Hiroshima a fun-ride-tram-life city!

## Map Data

- Language: Japanese
- Number of Map Editions: 2
- Published Map Formats: Print, Website
- Number of Sites Charted: 685
- Number of Global Icons Used: 58



Hiroshima's four local icons



# Mapmaking

Hiroshima · Japan

## Hiroshima Ecopeace Map

<http://home.hiroshima-u.ac.jp/ecopeace>



5000 maps printed

The Ecopeace Map is continuously created through a cycle of fieldwork, workshops, exhibitions and discussions called Open Cafés. The fieldwork for this round was done by traveling on the tram, then investigating the urban landscape on foot. Then, at workshops, we grouped the sites into different color categories: green for Good, red for Bad, and yellow for mixed opinions, with each age group plotting sites on their own maps. Interestingly, places that adults found green could be red for children, and vice versa!

The completed workshop maps were exhibited in August 2003, timed with the Peace and Consolation Ceremony in remembrance of the atomic bombing in Hiroshima. A Moving Map Exhibition took place on our two thematic trams, the “A-Bomb Tram” and an accessible low-floor tram, the “Green Mover.” The public was also invited to participate in Open Cafés, which have enriched our discussions on the next round of fieldwork.



(left to right)

**Hiroshima Ecopeace Map**, Contemporary layer (printed 2004)

**Hiroshima Ecopeace Map**, Historical layer (printed 2004)

Workshop maps are reviewed and compared



The Hiroshima Ecopeace Map consists of two editions: Historical and Contemporary, both based on the view from the tramline. The Historical edition is a memory map, depicting pre-war Hiroshima as seen through the eyes of Teruko Fujii, a tram driver at the time. The Contemporary edition is a compilation of recent public activities. Apart from the color-coded sites, approximately 30 “Ecopeace Sites” were chosen — both places we want to preserve and new places we hope will be considered “Ecopeace Sites” in the future. The Contemporary edition is printed on tracing paper, which makes it possible to cast the present map over the historical. We will be able to continue layering future editions, allowing us to visually observe changes in the city.

## Technical Data

### Software:

Adobe Illustrator  
Macromedia Dreamweaver  
Adobe Photoshop

### Hardware:

Macintosh workstation  
Trams  
Digital cameras  
Color printers and projectors  
Handmade fieldwork map folders

### Paper:

Recycled and tree-free, tracing paper

### Map Structure:

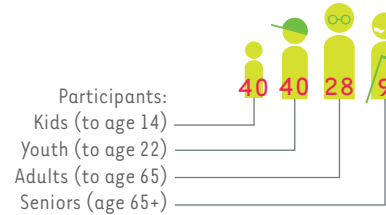
Folding map with transparent layer  
· A2 (59.4 X 42 cm / 23.4 x 16.5 in)

# Teamwork

Hiroshima · Japan  
**Hiroshima Ecopeace Map**  
<http://home.hiroshima-u.ac.jp/ecopeace>



Partners, Advisors and Board members: **30**



The Ecopeace Map is a collaboration that brings together elementary schools, universities, citizens, city administrators and corporations. A wide range of age groups participate, from 10-year-old schoolchildren to 75-year-old senior citizens. Living through different eras of Hiroshima at different stages of their lives, the participants exchange experiences, mapping their own visions and imagining the future of the city together.

Ecopeace Mapmakers from Hiroshima University include: Shoichiro Sendai (Associate Professor, Graduate School of Engineering), Akira Yamazaki (Professor, Graduate School of Education), Hirokazu Seki (Attached Elementary School of Hiroshima University) and his 40 young students, and many undergraduate and graduate students under the leadership of Ichiro Kihara. In addition, we've also had helpful assistance from two Hiroshima University academic experts, Yoshihiko Takezaki (Assistant Professor of

Geography) and Atsushi Hikita (Associate Professor of Information Design). Professional urban developers from Japan Civil Engineering Consultants Association Chugoku, including Director Fuminori Kato, have contributed valuable advice.

Many civil servants involved in urban development and landscape issues have also partaken in this project. Koshi Kamatani and Tomohito Matsuda, Directors of Hiroshima's Urban Planning Bureau, were the main participants from the city administration. In addition, senior citizens under the leadership of Kyoko Abe from the Aosaki Community Center have offered a great deal of valuable input on Hiroshima's local histories.

Teamwork is mainly facilitated through Open Café sessions held at the Citizen Exchange Plaza, which fosters a loose network of participants. Space is kindly provided by Hiroshima City Plaza for Town Development.

Icon cards in three colors >> are printed only as needed, and any extras are reused or recycled



<< Urban planning students debate their fieldwork findings



Schoolchildren conduct fieldwork while riding the tram, investigating the city with the help of university students



A fourth grade participant observes and records key sites



# Economics

Hiroshima · Japan

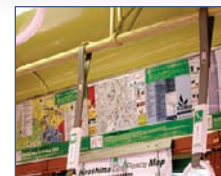
## Hiroshima Ecopeace Map

<http://home.hiroshima-u.ac.jp/ecopeace>

To sustain the project, the Hiroshima Ecopeace Map bases its activity on volunteer work. Through Hiroshima's Urban Planning Bureau we receive funding for cooperative research, and workshops are held at free public places such as elementary schools and other facilities owned by the city.

We are also supported by three companies that provide financial contributions, staff for workshops, new ideas and suggestions for activities. Hiroshima Electric Railway Company has provided their trams as a space for publicity and the exhibition, with the eye-catching exterior design supported by Sumitomo 3M. Printing costs, digital cameras and projectors, and other various devices used in workshops are made possible through the support of Hiroshima Xerox.

We distribute the maps free to our affiliates, but also sell them in major bookstores for 100 yen (US\$0.80). Our website is intended to be an



(upper, middle, lower) "Green Mover," part of the Moving Map Exhibition traveling the urban landscape. Aboard the "A-Bomb Tram," Green Maps, photos and icons made at our workshops were exhibited. The Moving Map Exhibition also displayed Green Maps from around the world

environmental study tool, which will be upgraded over the next two years with images of Hiroshima past and present.



Green Map Icons, as shown on Hiroshima's Ecopeace Map and promotional material

These icons are the common currency of all Green Maps



### Economic Data

**Type of Organization:** Non-profit grassroots group

**Support:** Grants, sponsorship, in-kind

**Major Project Supporters:** Hiroshima Xerox Co., Ltd  
Hiroshima Electric Railway Co., Ltd  
Sumitomo 3M Ltd

**Number of Paid or Volunteer Jobs Created:** 1

**Cost of Map:** 100 yen, but some were provided free

**Spin Off Projects:** Youth mapping resources



# Assessment

Hiroshima · Japan

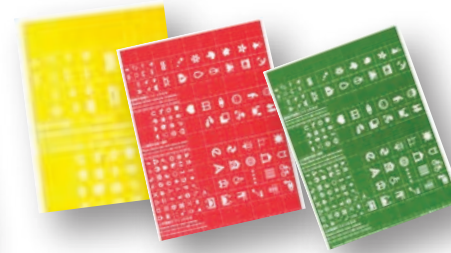
## Hiroshima Ecopeace Map

<http://home.hiroshima-u.ac.jp/ecopeace>

The Hiroshima Ecopeace Map is created through the teamwork of diverse people, reflecting its many contributors' sensibilities towards urban space. This is why we stress individual intuition, rather than relying on scientific evidence, when choosing Green Map Icons and sites for the map. For example, the Ecopeace sites on the Contemporary edition were chosen during discussions and presentations at workshops and Open Cafés. Parallel to the map reflecting diverse perspectives, in the future we also plan to collect and store useful scientific and environmental data.

The map also works to convey perspectives on the past through the Historical edition, because we believe that historical sensibility is indispensable in charting the future of the city. The Contemporary edition raises historical awareness through collaboration among different generations. For example, when children get in touch with the perspectives of seniors, they increase their historical sensibility. In the future, we plan to

(left to right)  
Promotional posters for the Ecopeace Map. Color coding adds an additional layer of meaning to the Green Map Icons used in our workshops



emphasize this dimension of seniors' lifelong education.

We have edited the set of Green Map Icons for use by children, created a homepage for urban ecology lessons and conducted research for a more effective Green Mapmakers' tool kit. All has been undertaken with consideration to diverse sensibilities of both space and time.

Ecology is about the relationship between humans and the Earth, and in today's urban landscape, the past and the future are connected. A balanced relationship with the city's history remains an important element of ecology.



(upper, middle) Different versions of workshop Green Maps, marked with icons, sketches and notes. During fieldwork, everyone adds "good" and "bad" eco-sites to specially prepared base maps. (lower) Digital photographs capture significant sites on a workshop map by senior citizens



## Conclusion

Hiroshima · Japan  
Hiroshima Ecopeace Map  
<http://home.hiroshima-u.ac.jp/ecopeace>

The uniqueness of Hiroshima's Ecopeace Map is that it consists of two editions, Historical and Contemporary. Layering the present city over the context of history allows us to locate the changes, which will help us think about the future of Hiroshima.

The Hiroshima Ecopeace Map is for everyone, including all generations of citizens. Through the process of mapmaking, each generation ultimately contributes to a single comprehensive map. All icons on the map, except for Ecopeace sites, reflect the sensibility of each and every participant.

**"We learned there used to be woods here, and always soldiers watching by the river. We were glad to find some "good" sites on the map even during such terrible times."**

-Youth workshop participants

**"Thank you for your report on the Ecopeace Map. This is a very interesting study for our students!"**


-Augustin Berque, French social sciences professor

***"Initially I felt I have nothing left to offer people. However, I am extremely glad to have participated."***


- Teruko Fujii, pre-war period tram driver

A city is a living thing, and therefore a city is always changing. The Ecopeace sites on the Contemporary edition merely express this year's vision of "Ecopeace," so with every new edition, the types and colors of icons may change. This year's Ecopeace sites carry our special hope: that red icons will transform into green. Our dream is for the children to carry on the Ecopeace message, and for them to participate in this activity as seniors in the future. We will continue to keep up our efforts until such a day comes.




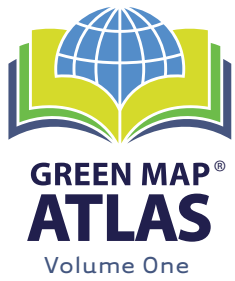
 Kyobashi Bridge, which was bombed during World War II, is rich with history and can be seen from the tram



 More pedestrians than cars travel tree-lined Wadai Street, where a playground offers a place to relax



 The Moving Map Exhibition, displaying Green Maps inside and outside the tram, passes in front of the A-Bomb Dome



(left to right) Young mapmakers recording data during a fieldwork session. At a cafe specializing in traditional okonomiyaki pancakes © Green Map System

## Credits

### Hiroshima's Story written by:

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 Hiroshima Ecopeace Map  
 1-4-1 Kagamiyama  
 Higashi-Hiroshima 739-8527  
 Japan  
 tel: +81 (0)824-24-7834

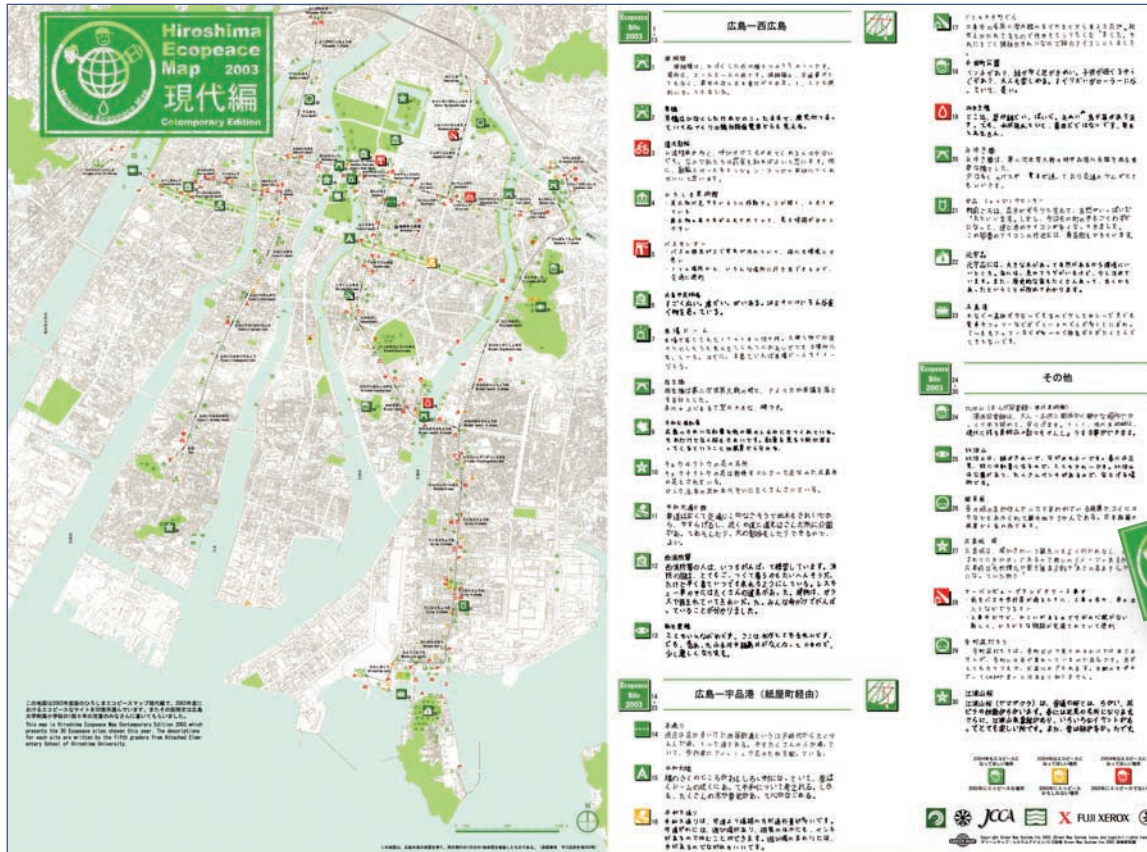
Locator globes and maps © Map Resources®. All rights reserved. All map, web and promo images © Hiroshima Ecopeace Map

### Other Photos:

Shoichiro Sendai and Green Map System



<< Eager participants at the Attached Elementary School of Hiroshima University © Green Map System



## Want This Map?

email: [sendai@hiroshima-u.ac.jp](mailto:sendai@hiroshima-u.ac.jp)  
 or visit the online store at  
[www.greenatlas.org](http://www.greenatlas.org)

[www.greenmap.org](http://www.greenmap.org) is your global link to every local Green Map project, multilingual Icon posters, an invitation to participate, and more.



© Green Map® System, Inc. 2004  
 PO Box 249, New York, NY 10002 USA  
[info@greenmap.org](mailto:info@greenmap.org)

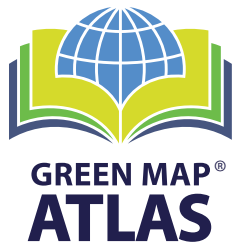
The Contemporary layer of the Hiroshima Ecopeace Map shows the city in 2003





# ROBESON

Green Mapmaking in Rural North Carolina USA



GREEN MAP®  
ATLAS

A project of the **Green Map System:**  
promoting sustainability and citizen  
action in communities around the  
world through locally created maps  
of the natural and cultural environment





# Introduction

Robeson County · North Carolina · USA  
 Robeson County Green Maps  
[www.ccarobesoncounty.org](http://www.ccarobesoncounty.org)

## Robeson County

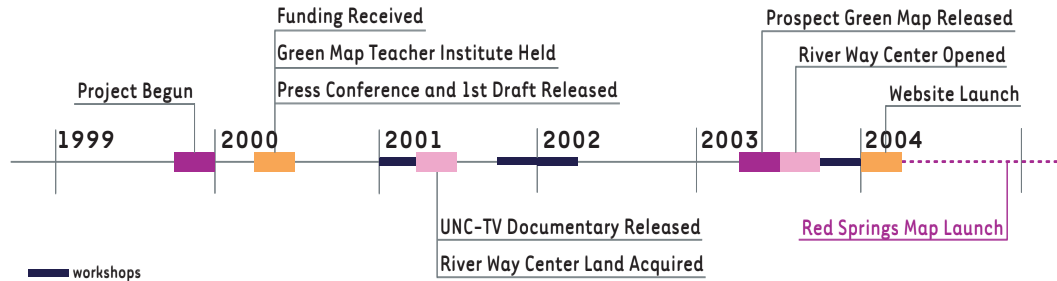


Detail of The Prospect Green Map (2003)

Through the Robeson County Green Map Project, youth and adults expand their knowledge and increase their appreciation of our biological and cultural resources in this, the most ethnically diverse, rural county in the US. Native, African and European American students, adults and elders in over 70 distinct communities in Robeson County, NC are investigating and charting local ecological, historical, cultural, civic and recreational treasures. These include 50 cypress swamps, 8,000 Carolina Bays and other glorious features in the Lumber River watershed. Green Mapping is a major educational project of the Center for Community Action (CCA) supported by the Rural School and Community Trust and endorsed by the Public Schools of Robeson County.

The project promotes interaction with people and nature including interviews with elders, community walks, nature hikes, kayaking and observation. Many local keepers of traditional knowledge are passing on, and the Green Map project

also helps to document, preserve and promote their wisdom and practices. We were seeking a project that would unite our rural communities and schools and provide grounding for educational efforts from civic engagement to curriculum reform, from nature and culture camps to ecological and cultural tourism. We found and broadened what we were looking for through Green Mapping.



### Map Data

- Language: English
- Number of Maps: 2
- Published Map Formats: Print
- Number of Sites Charted: 89
- Number of Global Icons Used: 23



Three of Robeson's five local icons



# Mapmaking

Robeson County · North Carolina · USA

## Robeson County Green Maps

[www.ccarobesoncounty.org](http://www.ccarobesoncounty.org)



1000 color copies of Prospect Map,  
4000 draft copies of both Prospect and Red Springs

The Robeson County Green Map is a student-led project. Each of our 70 distinct communities will produce its own Green Map, which will be combined into six high school District Maps, and then eventually brought together to form one Countywide Map. Place-based curriculum materials, a County Green Map Atlas and postcards of every community will accompany our maps, as will place-based learning opportunities at River Way Outdoor Adventure and Education Center, and expanded tourism-related resources.

Our first color map highlights resources in Prospect. Here, youth drew draft base maps on poster board (4 X 8ft / 1.2 X 2.4m) to use in their investigation and charting of township sites. The published map is GIS-based and includes all sites discovered by students. The students also provided site narration, edited by CCA staff.

We drew inspiration from many GMS projects, including Yellowknife (Canada), Copenhagen (Denmark), Santa Monica/



(left to right)

**The Red Springs Green Map (2004)**

**The Prospect Green Map (2003)**

On left, Robeson Green Map Co-director Patricia Locklear reviews the medicinal properties of goldenrod, a native plant



Ballona (California, US) and LoMap (New York, US). We also learned from work on curriculum and cultural atlases undertaken by the Alaska Native Knowledge Network ([www.ankn.vaf.edu](http://www.ankn.vaf.edu)).

We have learned that a Green Map is not an end product but a process of increasing community knowledge and pride of place that can lead to a variety of positive outcomes. Green Mapping can be most effective as part of a community organizing and leadership project. The more multi-dimensional the map is in terms of purpose, content and use, the greater and more diverse the community interest.

Maps are distributed locally free of charge, by mail or through CCA membership clusters, other community groups, classrooms, churches and government agencies.

## Technical Data

### Software:

ESRI ArcView  
CoreIDRAW 9

### Hardware:

Digital camera  
Video camera  
Kayaks  
Digital projectors  
Overhead projector

### Paper:

Recycled paper

### Map Structure:

Folding

· Both maps 35.6 X 21.6 cm / 14 X 8.5 in

# Teamwork

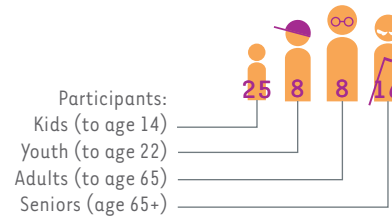
Robeson County · North Carolina · USA  
**Robeson County Green Maps**  
[www.ccarobesoncounty.org](http://www.ccarobesoncounty.org)

CCA organized an intergenerational Map Making Team including students (pre- and post-secondary), teachers, parents and elders. For adults, Green Mapping is a focus of our membership cluster groups and our highly regarded Grassroots Leadership Development Institute. In addition, we have summer college interns assisting with the project. For all the maps, students are taking the lead in the investigation and narration of key sites. In the town of St. Paul's, special education students at the middle school began the Green Map project.

Maps are designed to fully represent the biological and cultural diversity of each community, and stakeholders have quickly grasped the potential of Green Mapping to increase pride of place and reconnect diverse residents to our extraordinary ecological and cultural resources. Teachers appreciate the potential to reform curriculum with a place-based focus, increasing enthusiasm for the communities we call home.



Partners, Advisors and Board members: 5



Our maps include not only what exists now, but also what had been there previously – the 'horizontal' and 'vertical' dimensions of mapmaking. Interviews with elders teach us our history and traditional life ways and help us to creatively connect our past and our present.

Outreach has been prolific, including insights shared through national meetings, abundant email with educators and environmentalists worldwide and important articles such as those appearing in *Mother Earth News* (June 2002) and in "Rural Roots" (April 2001). We have helped influence mapmaking in San Francisco, Atlanta and elsewhere, and we have learned much from mapmakers and their projects worldwide.

Educators at the >>  
 Robeson County Green  
 Map Teacher Institute,  
 June 2000



<< Dr. William McKee Evans, (right) author and well-known historian of Robeson County, speaks with Reverend Arnold Walker (center) and Reverend Jimmy Jones (left), CCA Board Members



Mr. Leslie Sanderson, owner and operator of Sanderson's Pic and Pay Strawberry Farm, Site #13 on the Prospect Green Map



<< Members of the Fairgrove Green Map student team doing a plant and animal habitat survey of their schoolyard

The mapmakers meet on >>  
 a monthly basis to work on  
 their community Green Map





# Economics

Robeson County · North Carolina · USA  
Robeson County Green Maps  
www.ccarobesoncounty.org

Our countywide mapmaking has been supported primarily by tying Green Map fundraising to more concrete activities — place-based education, youth councils, leadership development, jobs and business development through tourism, and other efforts that can be more easily appreciated by funders. We describe Green Mapmaking as a core project that energizes and informs our other work, rather than as a stand-alone enterprise.

The Green Map project has generated numerous supplemental outcomes that consume resources but promise long-term benefits. Chief among these is the River Way Outdoor Adventure and Education Center, built on land generously provided by a local family who saw a newspaper article about the Green Map project. River Way provides youth, educators and parents with opportunities to experience, first-hand, the many ecological and cultural treasures of the Lumber River.

We have a number of future fundraising goals, including a Green Map festival



(upper, lower) Getting ready for a trip down the Lumber River at River Way. Youth fishing from kayaks in the vicinity of the North Carolina Indian Cultural Center

and stipends for older teens involved in supervising the Green Map activities of younger students.



Green Map Icons, as shown on the Robeson maps

These icons are the common currency of all Green Maps



## Economic Data

**Type of Organization:** Non-profit organization and grassroots group

**Support:** Grants, private funding, in-kind services

**Major Project Supporters:**  
Center for Community Action  
Rural School and Community Trust  
The R.M. Skipper Family  
Evelyn Zuber Trust  
Lumberton Kiwanis Club

**Number of Paid or Volunteer Jobs Created:** 2

**Cost of Map:** Free

**Spin Off Projects:** Outdoor Adventure and Education Center, curriculum workshops, tourism resources

# Assessment

Robeson County · North Carolina · USA  
 Robeson County Green Maps  
[www.ccarobesoncounty.org](http://www.ccarobesoncounty.org)



(left to right) The Robeson County Green Map story has captured media attention in "Rural Roots" (April 01), Fayetteville Observer (24 June 00) and the Robesonian (18 June 00)

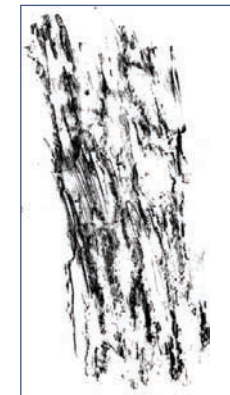
The Robeson County Green Map project is evaluated regularly by a group that includes CCA staff and board members, consultants, elders, adult guides, youth mapmakers and members of our community clusters.

Site criteria for the Robeson County map are somewhat broader than for other GMS-affiliated projects, explicitly including historical, recreational, and civic sites, and even past sites, as well as more conventional ecological and cultural resources. We have enjoyed extraordinary interest from local residents, the press (including newspapers in Lumberton and Fayetteville, NC) and from educators concerned about declining interest in our cultural and ecological assets, specifically by young people anxious to leave the area once they complete their formal schooling.

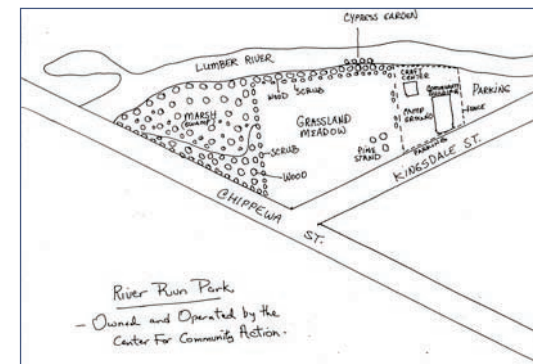
Our Green Map project has enjoyed great support from GMS staff, including workshops and consultations that have drawn new constituencies into the

mapmaking process. Moreover, we have helped highlight the potential of Green Mapping in diverse rural settings.

Public enthusiasm for our project, manifest in gifts such as the land that has become River Way and in intense discussions and planning for local sustainable tourism opportunities, has distracted us somewhat from the tasks of mapmaking. Also, a stricter timeline for map development would have improved our project to date. With so many strong institutional supporters, from governments to the schools, we can plan to spend more time in the future on the 'products' of Green Mapmaking, including web outreach to other rural communities seeking to expand educational and tourism-related opportunities through Green Mapmaking.



(left, upper & lower right) Bald Cypress tree rubbing – Robeson County Green Map curricula. At a monthly meeting, mapmakers discuss and add sites to a draft base map



A sketch map of River Way, where youth get involved in learning about their local environment





## Conclusion

Robeson County · North Carolina · USA  
Robeson County Green Maps  
www.ccarobesoncounty.org

***“I got more familiar with my surroundings and am now able to distinguish some plants and herbs that grow naturally in our county, and pass this knowledge on.”***

– Willa Robinson, Maxton Community Green Map team

Our project’s uniqueness lies in our setting — a large, ethnically diverse rural county; in our varied site selection — our ecology, history, culture, civic life and recreational resources; and in our focus — the community impacts of Green Mapmaking, more than its products. According to Green Map System, our program is one of the projects that is most comprehensively integrated into a local school curriculum.

Our youth and adults love the Green Map project. Interviews document its impact:

***“I have taken for granted the wonder, benefits and importance of species. How wrong I was to think that the only habitat that meant anything was mine and mine alone.”***

–Ryan Hunt, student, Fairgrove Middle School and Fairgrove Green Map team member

***“The history and culture of where I live has been brought to life. The project gave me a keen interest to dig deeper to find out more about my Native American culture and exactly how we were a part of these stories.”***

–Patricia Locklear, CCA staff member and Green Map Project Co-director

Mapmakers gather every month to share the abundant resources that the Green Map has helped all of us to discover, while we continue to map every community across the county.



★ The Lumber River at River Way Outdoor Adventure and Education Center



★ Cypress, the largest plant in North America east of the Rocky Mountains, is a major ecological feature in Robeson County’s 50 swamps and its river basin

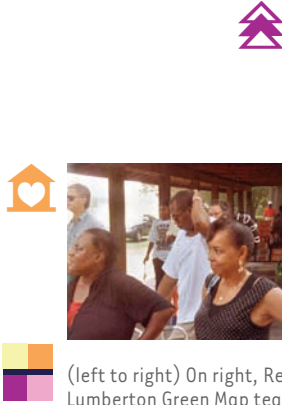
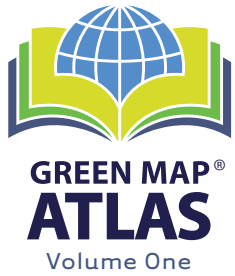


✿ The home of Early Bullard, the first Lumbee Indian judge in North Carolina. Site #27 on the Prospect Green Map



✿ Ye Old Spring, Red Springs’ namesake and Site #10 on their Green Map





(left to right) On right, Reverend Jimmy Jones, Green Map elder and advisor to South Lumberton Green Map team at the Center for Community Action Festival. Carolina Bays, a land feature left behind by ancient lakes, are shown as ovals on the Map

## Credits

**Robeson's Story written by:**  
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 tel: +1 (910) 739-7851

Locator globes and maps © Map Resources®. All rights reserved. All map, web, promo, images and photos © Center For Community Action. Special thanks to Productivity Links, Inc. Carolina Bays photograph courtesy of Thomas E. Ross, University of North Carolina at Pembroke



<< River Way work team takes a break while constructing a new porch

## Want These Maps?

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 or visit the online store at  
[www.greenatlas.org](http://www.greenatlas.org)

[www.greenmap.org](http://www.greenmap.org) is your global link to every local Green Map project, multilingual Icon posters, an invitation to participate, and more.



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The Red Springs Green Map (2004)



# KYOTO

## Green Mapmaking in Japan's Cultural Capital



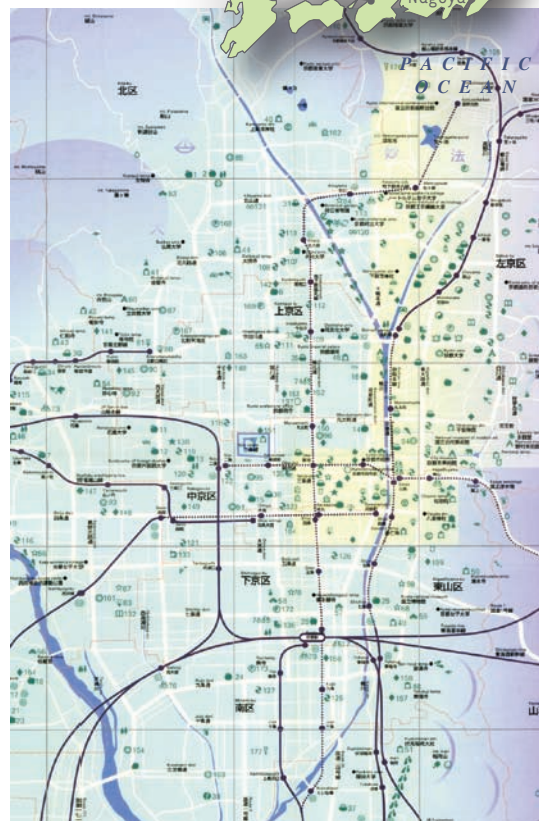
A project of the **Green Map System**: promoting sustainability and citizen action in communities around the world through locally created maps of the natural and cultural environment



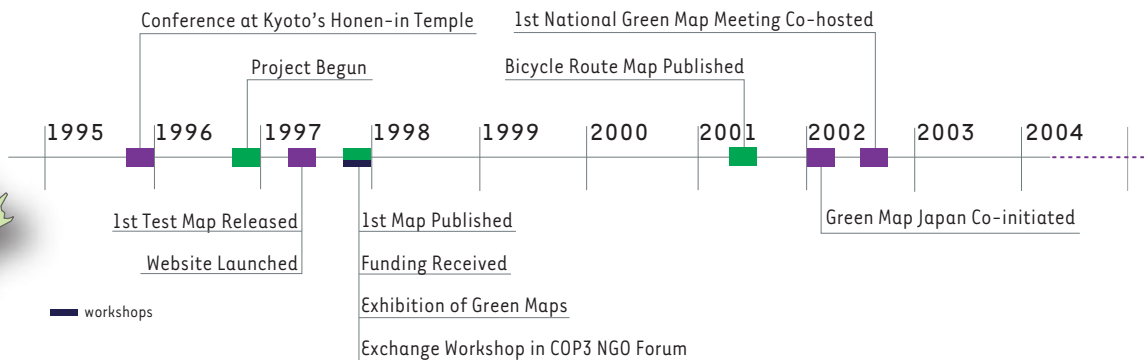


# Introduction

Kyoto · Japan  
 Kyoto Green Map  
[www.joho-kyoto.or.jp/~tennen](http://www.joho-kyoto.or.jp/~tennen)



Detail of the Kyoto Green Map (1997)



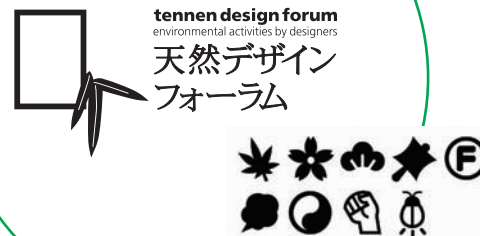
The heart of the Japanese people belongs to Kyoto, which flourished as the capital of Japan for over ten centuries. Now home to a population of 1.46 million and many exquisite temples, shrines and World Heritage sites, Kyoto is a city of concentrated Japanese culture. Traditional Japanese philosophy is vividly illustrated in the structure of the city, its architectural construction and in its citizens' way of life.

We at the Tennen Design Forum created the Kyoto Green Map in 1997 for the occasion of the United Nations Framework Convention on Climate Change Conference (COP3), hosted here in Kyoto. We thought creating a map reflecting the environment of Kyoto for both domestic and international NGO participants would be a wonderful starting point for the transformation of historical Kyoto into an ecological city, one suitable for the world awaiting us. This Green Map, the eighth global creation and the first in Asia, had a sensational debut at COP3, triggering the spread of Green Map projects all over Japan.

As the first non-Western Green Map, we wanted Kyoto's map to be a mediator of Asian and Japanese ecological wisdom. Not only does this Green Map convey environmental information for local citizens, but the listings of prominent shrines, temples and major facilities also encourage eco-tourism in Kyoto.

## Map Data

- Language: Japanese & English
- Number of Map Editions: 2
- Published Map Formats: Print, Website
- Number of Sites Charted: 485
- Number of Global Icons Used: 65
- Number of Local Icons Used: 16



Nine of Kyoto's sixteen local icons



# Mapmaking

Kyoto · Japan  
Kyoto Green Map  
www.joho-kyoto.or.jp/~tennen



3,000 maps printed and distributed

Our first encounter with the Green Map concept was in 1995 at our international conference, held at Kyoto's Honen-in Temple. The three-day conference on designers' contribution to environmental solutions included a workshop with Wendy Brawer of Green Map System. Our group walked around Honen-in's grounds designing icons for a sketch map. Twelve of these were officially adopted for the first version of Green Map Icons.

A year later, our Tennen Design Forum core group joined the "Climate Forum Kyoto Net" and announced plans to create Kyoto's Green Map in English and Japanese. On Earth Day 1997, we distributed a test map (two sides A4, monotone, 1000 copies), calling for project participants and support. We held orientation sessions and created postcards and research sheets to collect site ideas at our monthly workshops and field trips. By September, the information gathering was finished and collected on a database. Ten designers and two translators created the map in the weeks



(left to right) **Kyoto Green Map** (1997) cover; **Kyoto Bicycle Map** (2001) cover and reverse side with route details; Charting the sites during a Green Map group meeting



leading up to December's conference. We also planned a bus tour of Kyoto's environmental destruction, an exhibition of worldwide Green Maps and workshops with environmental NGOs during COP3. We distributed the map at the conference site, the NGO forum, and hotels. Later we created a website, [www.joho-kyoto.or.jp/~tennen](http://www.joho-kyoto.or.jp/~tennen), to share this original ecological project with people throughout Japan.

The Kyoto Green Map uses light purple as the base color tone, derived from an old expression *Sanshi-Suimei*, meaning "Purple Mountain, Lucid Water" — reflecting mountains rich in nature and fresh air, and the striking clarity of pure streams. The design concept refers to historical maps of Kyoto, illustrating its characteristic landscape. One side charts the entire city, and the reverse emphasizes three regions: Sagano/Arashiyama, Central Kyoto, and Sakyo ward—these are either major sightseeing areas or districts surrounding the COP3 conference. We also applied congruent grids on both sides, so that users could easily locate each site.

## Technical Data

### Software:

FileMaker Pro  
Adobe Illustrator

### Hardware:

Research postcard  
Data collection forms  
Newsletters  
Cameras  
Display tools

### Paper:

Tree-free paper with soy-based ink

### Map Structure:

Full color folding  
· Citywide map: A2 (59.4 X 42 cm / 23.4 X 16.5 in)  
· Bicycle route map: A3 (42 X 29.7 cm / 16.5 X 11.7 in)

# Teamwork

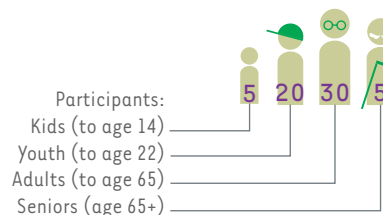
Kyoto · Japan  
**Kyoto Green Map**  
[www.joho-kyoto.or.jp/~tennen](http://www.joho-kyoto.or.jp/~tennen)

The map was made possible by the work of 10 designers and 60 volunteers, including housewives, children, students, administrators and the general public. We also received specialized information from numerous environmental groups, including the 22 groups in the Kyoto Water and Greenery Protection Network, Eco-Citizen, Green Action Against Nuclear Power Generation, Old Lumber Bank Society, Honen-in Forest Classroom, Kyoto Transportation Citizen Research Committee, Committee for Rethinking Disposable Culture, Kyoto Consumer Union Network and Kyoto Mammals Research Association. The design team consisted of designers from the 1995 Honen-in conference, as well as professionals and students we have encountered since then.

We designed several local icons including the noble "Japanese Gardens," a completely different concept from Western gardens; well-known places for "Cherry Blossoms" and "Autumn Leaves;" and places you can view "Fireflies" and



Partners, advisors and Board members: **10**



"Flying Squirrels," rarely seen in big cities. Commerce icons include "Handicrafts," "Locally Raised Kyo-Vegetables," "Flea Markets" and "Traditional Medicine Sites." We were pleased to find our new local icons and suggestions for revised symbols reflected on the second version of the global Green Map Icons.

In 2001, we directed the eco-transportation and bicycle initiatives of the Environmental Policy Department's "Miyako Agenda 21 Forum." 3000 copies of our pocket-sized Kyoto Bicycle Route Map were published. Derived from our first map, the Bicycle Map charts four suggested cycling courses and plots hotels that welcome bikes, repair and rental shops, bicycle etiquette, hospital locations (in case of accident), public toilets and bicycle parking lots.

Green Maps from around >> the world were exhibited and discussed during UN COP3



<< Field trip with volunteers and students



Kyoto Mapmakers (from left to right): Takashi Hojo, Misako Yomosa, Yoshitaka Tekebayashi, Yuko Tanaka, Akihiro Yamada



Tennen Design Forum hosted the Honen-in conference in 1995, where we first participated in Green Mapmaking

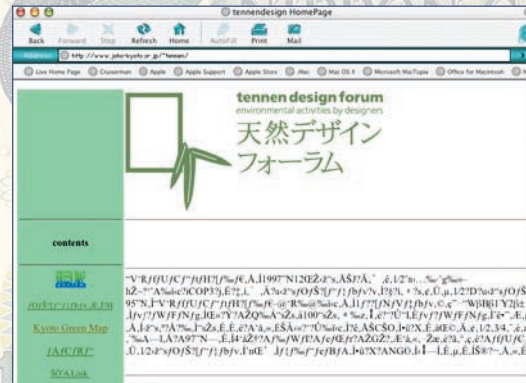
# Economics

Kyoto · Japan  
**Kyoto Green Map**  
[www.joho-kyoto.or.jp/~tennen](http://www.joho-kyoto.or.jp/~tennen)

As the host city of UN COP3, Kyoto received a few million yen through the Japan Fund for Global Environment. This sum was split by many environmental groups, with a small amount left for the Kyoto Green Map project—approximately 110,000 yen (US\$1,000). A paper company, Heiwa Shigyo, donated tree-free paper and we received a large discount for printing with soy-based ink. Nevertheless, the funding was not enough to cover the entire production cost. After discussion among the project's core members, we decided to publish 3000 copies and to cover the costs by selling the map for 500 yen (US\$4) to the public. We provided free copies to the COP3 participants and to Green Map System for distribution to new network members, the press and exhibits. Later on, copies of our citywide and bicycling maps were also provided to the Green Map Japan network.



Green Map Japan website  
 Approximately **47,160** website visitors per year  
 (Tennen Website: approximately 480 visitors per year)



(upper) Tennen Design Forum website  
 (lower) When we created the Bicycle Map, we also developed proposals for bicycle infrastructure for Kyoto's streets



Green Map Icons, as shown on Kyoto's two editions

These icons are the common currency of all Green Maps



## Economic Data

### Type of Organization:

Design group

### Support:

Grants, in-kind, sponsorship, membership fees

### Major Project Supporters:

Climate Network Kyoto  
 The Kyoto Water and Greenery Protection Network, a coalition of 22 groups

### Number of Paid or

**Volunteer Jobs Created:** 0

### Cost of Map:

500 yen to the public, free for network members

### Spin Off Projects:

bike map





# Assessment

Kyoto · Japan  
 Kyoto Green Map  
[www.joho-kyoto.or.jp/~tennen](http://www.joho-kyoto.or.jp/~tennen)



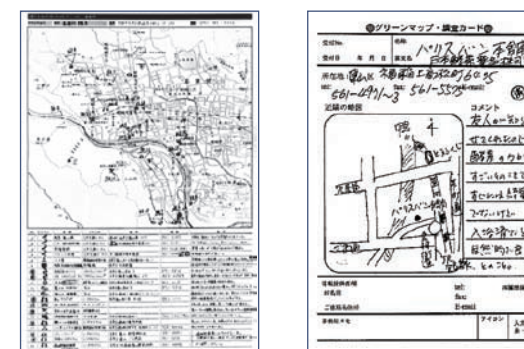
(left to right) Our map was featured in *Co Co Chi INAX* magazine (November 02); *Mainichi* (17 April 97); *Co Co Chi* (November 02); *Lapin* map magazine (March 02); Middle school art textbook; *Pictograms and Icon Graphics* (2002)

As ours was the first Green Map in Japan, the mapmaking process was full of trial and error, but we feel the project has been a success. Ever since distribution of the original test map on Earth Day 1997, the Kyoto Green Map project has received great media attention. It has been featured in newspapers including *Asahi*, *Yomiuri*, *Mainichi*, *Kyoto*, *Sankei*, *Nippon Keizai*, and the English *Daily Yomiuri*. Other publications include *National Geographic Japan*, *Lapin* map magazine, *Middle School Textbook of Arts* by Mitsumura Toshio, *INAX/PR* magazine *Co Co Chi*, Earth Environment Foundation's *Earthian*, *Nikkei ECO21*, *GIS NEXT* and *Pictogram & Icon Graphics* by Pie Books Inc. and more.

The intention of the project was to use the map as a medium to change today's reality. Our maps call attention to the ecological wisdom we can adopt in our daily lives. In Kyoto, which was originally constructed according to the ancient Chinese philosophy of spiritual/natural

essence called *feng-shui*, the daily experience of life brings us face-to-face with nature. For example, Kyoto's traditional *machiya* (town houses) are full of creative devices adapted for our hot summers. Architectural components such *shoji* (paper screens), *fusuma* (sliding doors), and *tatami* mats have become standardized, suitable for any house. Our "Locally Raised Kyo-Vegetables" icon reflects a recent surge in the popularity of our traditional, highly nutritious and beautiful vegetables, even prompting a labeling and certification system.

The map is a unique environmental database of our city to share with citizens, and it creates the potential for a collaborative network of environmental groups. We are still in search of pragmatic ways to apply Kyoto's citizen power to the city's environment bureau.



(upper, lower) Data collection sheet and postcard used in research; Back cover of our 1997 test map promotes understanding of climate change and UN COP3

## Conclusion

Kyoto · Japan  
Kyoto Green Map  
www.joho-kyoto.or.jp/~tennen

Through discussion, observation and fieldwork for the Green Map, we have re-discovered the superb natural wealth of Kyoto and the traditional Japanese way of life, in coexistence with nature. From pure freshwater springs, used to produce tofu, sake and Japanese sweets, to the habitat “buffer zones” of forests around shrines and temples, which harbor a diversity of animals—daily life in Kyoto is grounded in nature. It is a characteristic Kyoto tradition to repair and reuse commodities, use local resources and insist on recycling. While ruthless environmental destruction occurred during the 1980-90’s bubble economy, vigorous protests by citizens in community networks took place in response.

***“The eco friendly Kyoto Map incorporates distinctive features of the city and gives their map a local flavor.”***

– Daily Yomiuri

***“Discover another Kyoto from an ecological perspective with Kyoto Green Map.”***

– Co Co Chi, INAX PR magazine

***“Dispatching unique ecological information from Kyoto - this communicative map goes beyond obstacles of different languages.”***

– *Earthian*, Earth Environment Foundation magazine

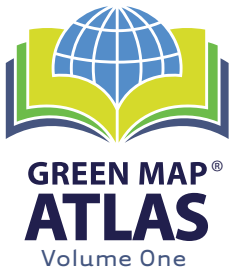
Kyoto Green Mapmakers helped initiate Green Map Japan, a network to support Green Mapmaking projects in many cities. Japanese maps have various themes, from sustainable transportation to community re-building to landscape preservation. Green Map Japan also began developing a children’s educational tool kit in 2002, teaching environmental awareness, computer skills and the ability to synthesize and communicate within community.

The Green Map is both a means of raising people’s consciousness and sharing information among citizens. Although some of our ecological wisdom has been lost in modern times, harmonizing our current lives with tradition might provide a shortcut to a more sustainable society. We hope that Green Maps will help to change reality, little by little.

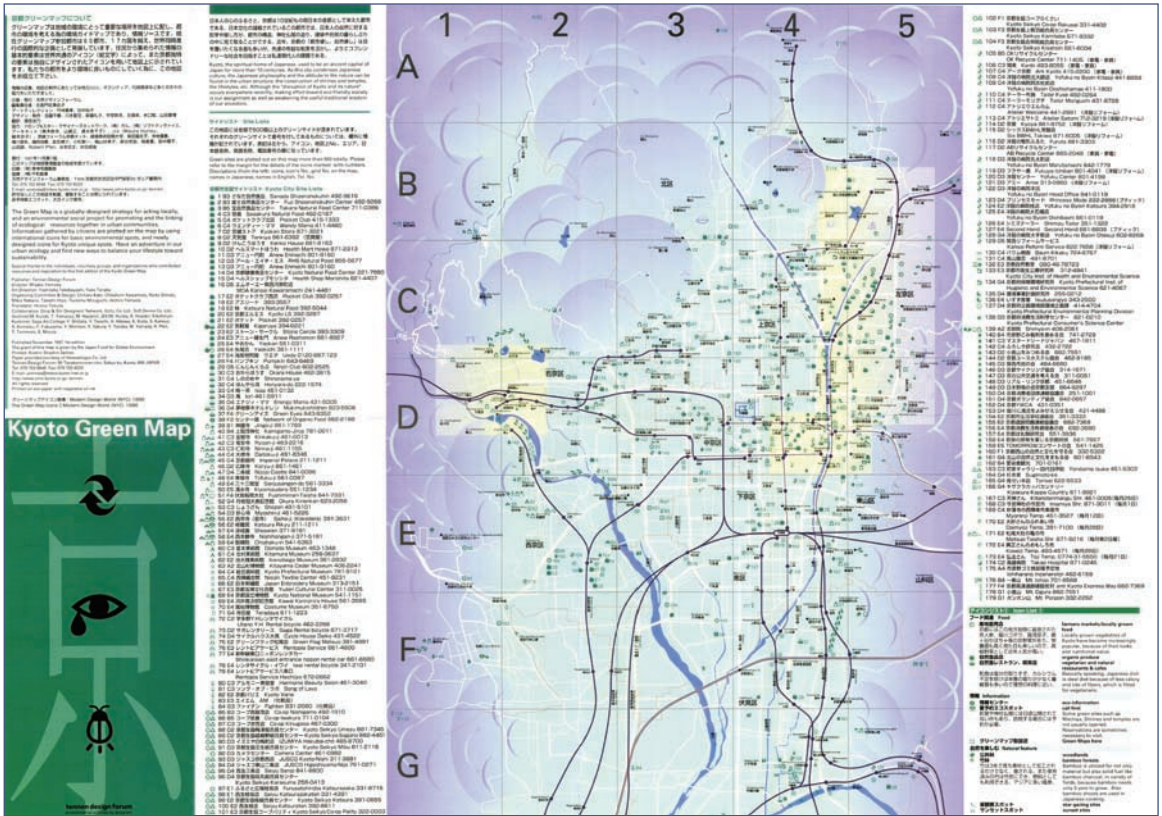


(top, left, right) A shop on Sanjo Street, selling brooms and scrubbing brushes produced with local materials; This World Heritage Forest at Shimogamo Shrine, called Tadasu-no-mori, has plants and trees indigenous to Kyoto; The Somei Spring Water at Nashinoki (Pear Tree) Shrine is well known for its fresh taste





(left to right) A historical mountain called Ichijoyama was destroyed by thoughtless development; Around the Gion Shinmachi neighborhood, traditional tea houses and restaurants line the canal



# Credits

**Kyoto's Story written by:**  
 Misako Yomosa, General Manager  
 Tennen Design Forum  
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Locator globes and maps © Map Resources®. All rights reserved. Map images of Kyoto Green Map & other photos: © Tennen Design Forum (Misako Yomosa, Takashi Hojo) Tennen Design Forum is a designers' non-profit organization contributing to environmental issues.



<< Kanesho is a traditional shop selling regionally grown, seasonal Kyo-vegetables



## Want These Maps?

email: [m-yomosa@smail.plala.or.jp](mailto:m-yomosa@smail.plala.or.jp)  
 or visit the online store at [www.greenatlas.org](http://www.greenatlas.org)

[www.greenmap.org](http://www.greenmap.org) is your global link to every local Green Map project, multilingual icon posters, an invitation to participate, and more.



© Green Map® System, Inc. 2004  
 PO Box 249, New York, NY 10002 USA  
[info@greenmap.org](mailto:info@greenmap.org)

Kyoto Green Map (1997) shows Kyoto city as a poetic landscape





# TOKYO

## Green Mapmaking in Japan's Capital

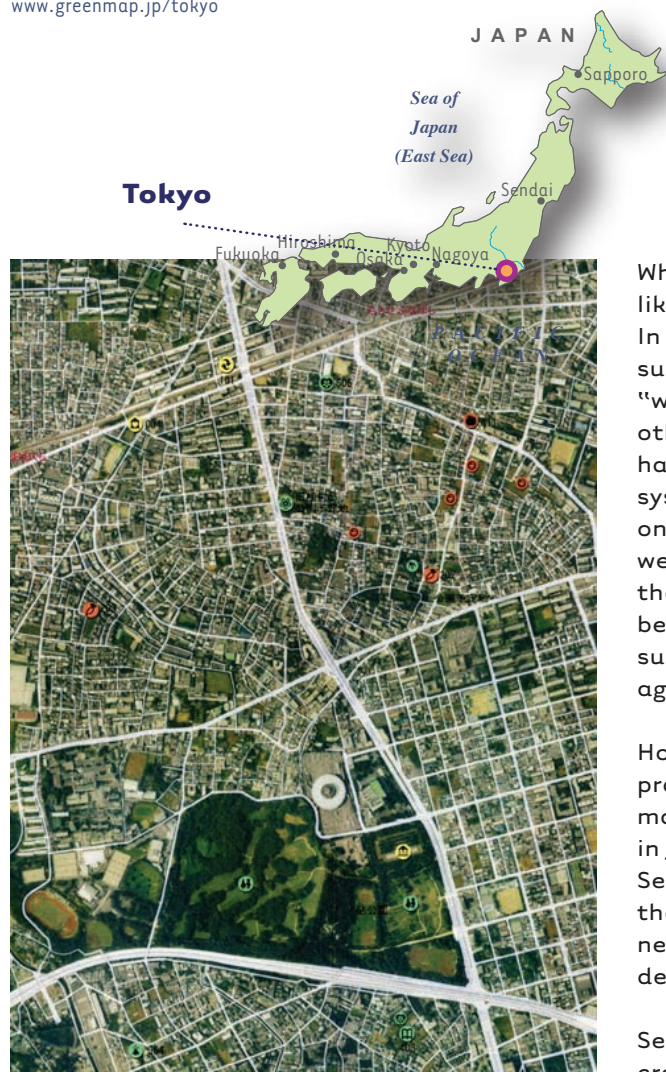


A project of the **Green Map System**: promoting sustainability and citizen action in communities around the world through locally created maps of the natural and cultural environment

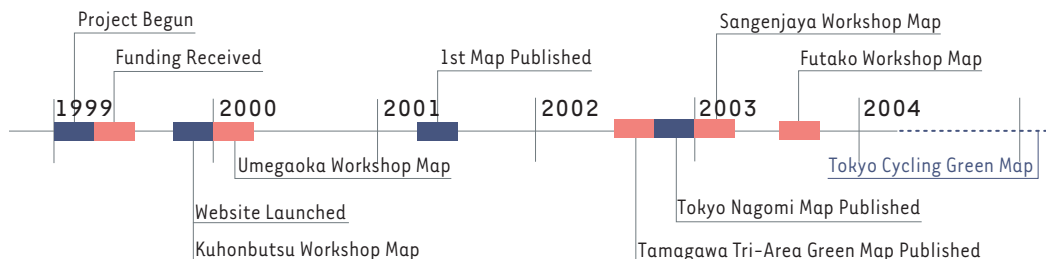


# Introduction

Setagaya Ward · Tokyo · Japan  
 Tokyo Green Maps  
[www.greenmap.jp/tokyo](http://www.greenmap.jp/tokyo)



Detail of Setagaya Green Map (2001)



What is “green” about a mega-city like Tokyo, home to 12 million people? In former times, Tokyo consisted of sustainable, efficient communities, where “waste” was recycled into material for other purposes. Such traditional practices have been replaced by modern commercial systems, consuming energy and resources on a colossal scale. Farmland and gardens were developed into high-rises, reducing the amount of greenery, and today Tokyo becomes a sweltering heat island each summer. Those who knew Tokyo 30 years ago regret these changes.

However, many community-strengthening practices can be found in Setagaya, making this district unique and famous in Japan. Working in southwest Tokyo, the Setagaya Green Map was created to chart the precious resources that are often neglected by economically-focused urban development.

Setagaya’s was the first Green Map created in the metropolitan Tokyo area.

From the start, I doubted that Tokyo could be charted on a single Green Map due to its size. Even Setagaya, one of 23 wards that make up central Tokyo, is too big to be considered a community, with its population of 0.8 million. I decided to first map the region that I live in and know very well. The core mapmaking team, Hiroo Maruya, Nobue Suzuki and myself, are all architects who live here and are involved in community activities.

## Map Data

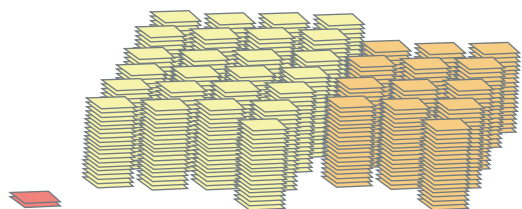
- Language: Japanese
- Number of Map Editions: 3
- Published Map Formats: Print, Website
- Number of Sites Charted: 140
- Number of Global Icons Used: 28



Tokyo’s three local icons



# Mapmaking



2000 Setagaya Green Maps, 500,000 Tamagawa Tri-Area Green Maps, 260,000 Nagomi Maps

We started creating neighborhood Green Maps with community members through what we call *machi-meguri* workshops. *Machi* means town, and *meguri* refers both to walking around and the circulation of value within the community. We held the first one in the Kuhonbutsu neighborhood in 1999, when GMS Director Wendy Brawer visited Japan.

Our *machi-meguri* workshops begin with a presentation of Green Map Icons. With basic knowledge of Green Mapmaking, participants then go out in small groups with a blank map and icon index. Workshops are most successful when guided by local community leaders. The unique neighborhood maps created at workshops, distributed as free newsletters to participants and community members, are sub-sets of the overall Setagaya Green Map. All participants are credited on these expressive maps, showing that the information is not filtered in the same way as on the bigger Setagaya Green Map.



(left to right)  
Setagaya Green Map (2001)  
Tamagawa Tri-Area Green Map legend (2002)  
Tokyo Nagomi Map (2002)  
Children exploring their neighborhood using the Green Map Icons at the Futako workshop



The key idea behind *machi-meguri* workshops is that the map users also become mapmakers. Usually elderly people who grew up in the area are happy to explain local history to children; they provide background information while a Green Map facilitator helps classify and record the data.

Appropriate icons are chosen through discussions, with new ones created when needed, such as our *daikon* (Japanese radish) icon symbolizing "community farm." We found that children are always good at creating new icons. The discussions can also be useful in children's environmental education. For example, when a child proposes adding a convenience store icon, a conversation follows on its appropriateness compared to local stores.

## Technical Data

### Software:

Adobe Photoshop  
Adobe Illustrator  
GIS software

### Hardware:

Computers  
Digital cameras  
Videos  
Bicycles  
Projectors

### Paper:

Tree-free kenaf and recycled

### Map Structure:

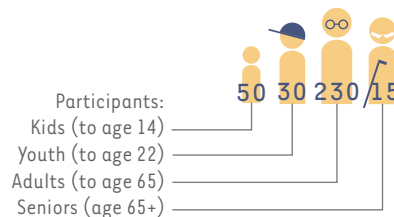
Folding

- Setagaya Green Map: 88.4 X 77 cm / 34.8 X 30.3 in
- Tamagawa Tri-Area Green Map: 59.4 X 42 cm / 23.4 X 16.6 in
- Tokyo Nagomi Map: 50.8 X 36.8 cm / 20 X 14.5 in



# Teamwork

Setagaya Ward · Tokyo · Japan  
 Tokyo Green Maps  
[www.greenmap.jp/tokyo](http://www.greenmap.jp/tokyo)



A series of *machi-meguri* workshops were held in different areas of Setagaya in collaboration with local community groups, such as Earth Day Money Setagaya (local currency) and Tamagawa Volunteer Bureau. Workshop participants are invited through these networks. We also have a list of experts who support us from specific fields. Masakuni Enomoto, an expert naturalist in the Setagaya area, guides workshops when nature observation is part of the program.

To gather comprehensive information for the first printed version of the Setagaya Green Map issued in June 2001, we distributed questionnaires at community events and by mail. 180 proposed sites were filtered and checked to ensure correct information, an important process requiring regular updating. Green spaces on private property and historical buildings sometimes disappear, and commercial entities often change. The number of sites included in the first version is rather low because this process

involves a lot of work. We intend to filter information online for the next version.

Inspired by other Green Maps including Toronto's, we decided to use an aerial photograph as the base map to give an overall image of existing greenery. However, without road lines clearly indicated, we found it difficult to use as a walking guide. We overlaid the photograph with precise digital road data to facilitate its use as a map, obtaining all original data free of charge from the local government for this non-profit activity. Adjusting more than 30 aerial images was painful work, but accomplished thanks to the effort of a core member.

The compass rose on the Nagomi Map reflects its "peace and quiet" theme



<< Specially prepared base maps are used to collect data at each workshop



Participants eagerly exchange ideas about sites in their neighborhood



<< Kuhnobutsu workshop participants discuss criteria for their neighborhood Green Map

Seeing things >> from a new perspective at the *machi-meguri* workshop in Kuhnobutsu



# Economics

Setagaya Ward · Tokyo · Japan  
 Tokyo Green Maps  
[www.greenmap.jp/tokyo](http://www.greenmap.jp/tokyo)

Setagaya Community Design Fund supported the first Setagaya Green Map. A local printing company, Buyodo, provided a large discount, and the map was distributed free at green spots and community events. Requests continue to come in from our website. We charge 300 yen (US\$2.80) per copy to those outside of Setagaya, but residents pay only for postage in exchange for their contributions to our update questionnaire.

The free neighborhood Green Maps created at *machi-meguri* workshops are made in A3 format to fit the least expensive offset printer. Another map charting the Tamagawa Tri-Area was published in a free newspaper. This project created a controversy among core members because a real estate developer sponsored the 500,000 full-color aerial view maps. We decided that since the paper would be wasted in any case, it would be better to encourage longer use for a good purpose. We considered the map a success because



Approximately **36,000** website visitors per year



(upper, lower) A page from the Green Map Japan website. World Green Maps exhibit and Icon balloons created for Tokyo Art Jungle's Yamanote-sen Green Map project at the Tokyo International Forum (August 2002)

of the positive reactions we received, including a schoolteacher who requested extra copies for her class.



Green Map Icons, as shown on Tokyo's Setagaya and Nagomi maps

These icons are the common currency of all Green Maps



## Economic Data

**Type of Organization:** Non-profit

**Support:**  
 Grants, private funding, in-kind

**Major Project Supporters:**  
 Setagaya Community Design Fund

**Number of Paid or Volunteer Jobs Created:** 10

**Cost of Map:** Free, 300 yen or postage paid

**Spin Off Projects:** Exhibits, conferences, organized bicycle ride



# Assessment

Setagaya Ward · Tokyo · Japan  
Tokyo Green Maps  
www.greenmap.jp/tokyo



(left to right) Press coverage has included the *International Herald Tribune* (08 May 03), a promotional poster inviting the public to Setagaya's first workshop, article in *Asahi Shimbun* (27 March 03), inside page of the cover story on the Nagomi Map in *Be-Pal* magazine (December 02)

In determining selection criteria for the first edition, core group members focused on key factors essential to sustainable living — community involvement, reuse/recycling of material and environmental preservation. We classified Green Map Icons into three categories: Food, Resources and Greenery. One of our major concerns, urban farming, relates to all three. For example, Ohira Farm is an active green space producing organic vegetables that are sold to local community members, who in turn provide extra labor on the farm. Some organic waste from the community is also composted at the farm.

There is no single Tokyo Green Map yet, but starting with Setagaya has turned out to be a good choice. Many other Green Mapmaking activities have since emerged in other districts of Tokyo, including Suginami, Koganei and around the Yamanote-sen train line. In a big city like Tokyo, the character of each community is very different.

A separate but related Green Map, the Tokyo Nagomi Map, was created in collaboration with *Be-Pal* magazine in December 2002 in an effort to locate “peace and quiet” in the city. It was published along with a 20-page article illustrating the spots. Covering most of the central area of Tokyo, it provides information on bike facilities and highlights *nagomi* spots, where people can relax and feel green. These places are more easily accessible by bicycle because they tend to be located off the major train lines and arterial roads. *Nagomi* spots are linked by streets safe for cycling.



(upper, lower) A finished neighborhood Green Map produced at the Kuhnobutsu workshop. The Tamagawa Tri-Area Green Map had the largest print run of any Green Map to date



## Conclusion

Setagaya Ward · Tokyo · Japan  
Tokyo Green Maps  
[www.greenmap.jp/tokyo](http://www.greenmap.jp/tokyo)

In the near future, the Tokyo Cycling Green Map will add an additional layer about bicycling that connects district Green Maps and includes safe routes and rental/repair shops. Urban Ecology Tokyo, a new group extended from Setagaya Green Map, will provide communication tools such as an interactive database, as well as support for Green Mapmakers and bicycle advocacy groups in Tokyo. Establishing a citywide cycling route network and forming the bicycling community into a more powerful coalition are the main objectives of this project.

Our Green Map Japan network, which I co-initiated with Misako Yomosa of Kyoto Green Map in 2002, has continued to grow stronger. We have developed a website, [www.greenmap.jp](http://www.greenmap.jp), as well as educational tools, thanks to support from Japan-US Community Education and Exchange. We felt it was necessary to create a national network for mapmakers to exchange information, and to ensure independence from commercial influences, which are sometimes drawn by extensive media

***“The liveliness of the map is totally different from regular maps. I realized even trees on private property can contribute to a better environment.”***

– Tomoko Honda

coverage of our Green Maps. I hope to see Green Maps become a platform for the general public to move towards a more sustainable way of living.

***“I was pleased to find this wonderful map. Since I am seeking a good place to live in Setagaya, the map will give me a clue.”***

– Naoko Sonobe

***“After seeing the Tokyo Nagomi Map, I wish to get involved in mapmaking. I always feel the need for a better bicycle environment in Tokyo.”*** – Mihoko Uramoto



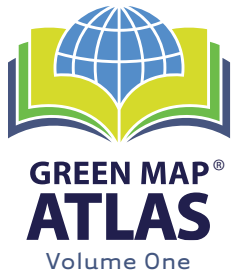
Child-friendly icons are given to places such as Hanegi Play Park, an adventure facility supported by volunteers and the local government



Ohira farm grows organic vegetables in a residential neighborhood of Setagaya



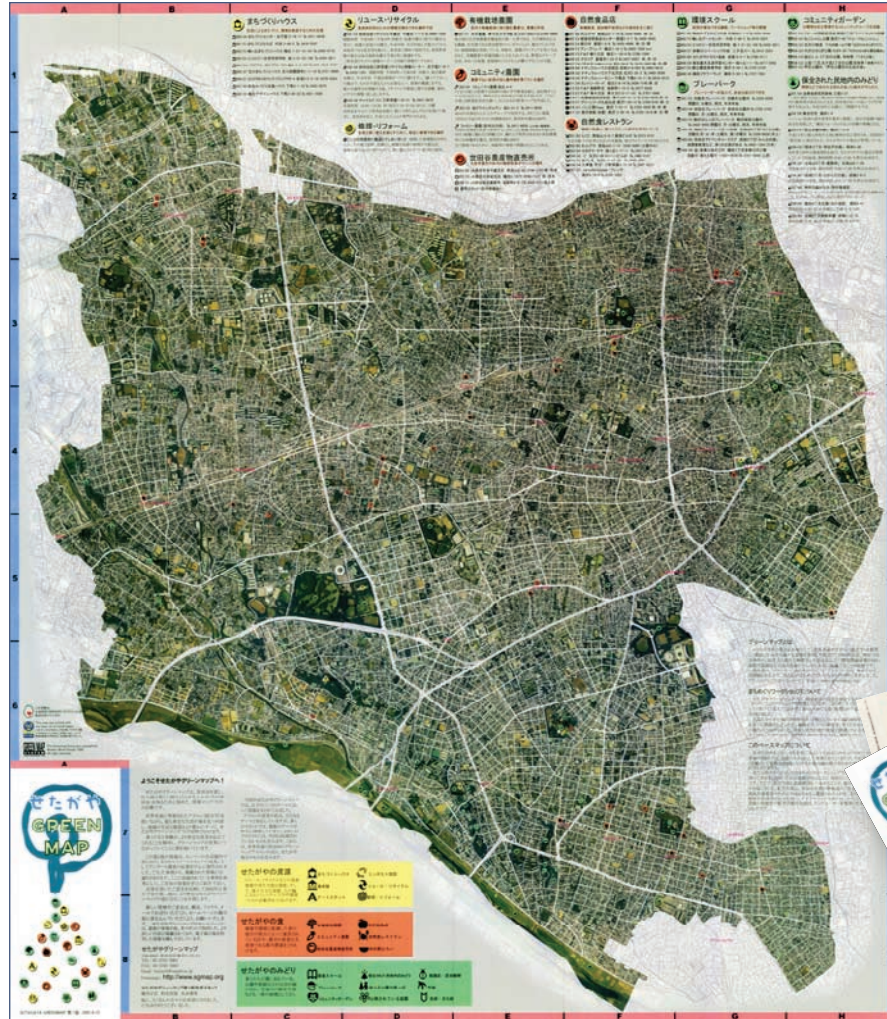
The former Kosaka residence is both a historic site and “Greenery” example



<< Places of cultural significance, such as this traditional craftsman's shop, are included as "Resource" sites



A patch of urban forest preserved by community action against development



Setagaya Green Map (2001)

## Credits

### Tokyo's Story written by:

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Japan

tel: +81 (0)3-5701-5901

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<< Tokyo Cycling Green Map project members at Royal Palace Park

## Want These Maps?

online: [www.greenmap.jp/tokyo](http://www.greenmap.jp/tokyo)  
email: [horichi@tamabi.ac.jp](mailto:horichi@tamabi.ac.jp)  
or visit the online store at  
[www.greenatlas.org](http://www.greenatlas.org)

[www.greenmap.org](http://www.greenmap.org) is your global link to every local Green Map project, multilingual icon posters, an invitation to participate, and more.



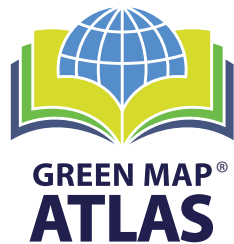
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[info@greenmap.org](mailto:info@greenmap.org)





# NEW YORK

Green Mapmaking in the USA's Big Apple



A project of the **Green Map System**: promoting sustainability and citizen action in communities around the world through locally created maps of the natural and cultural environment





# Introduction

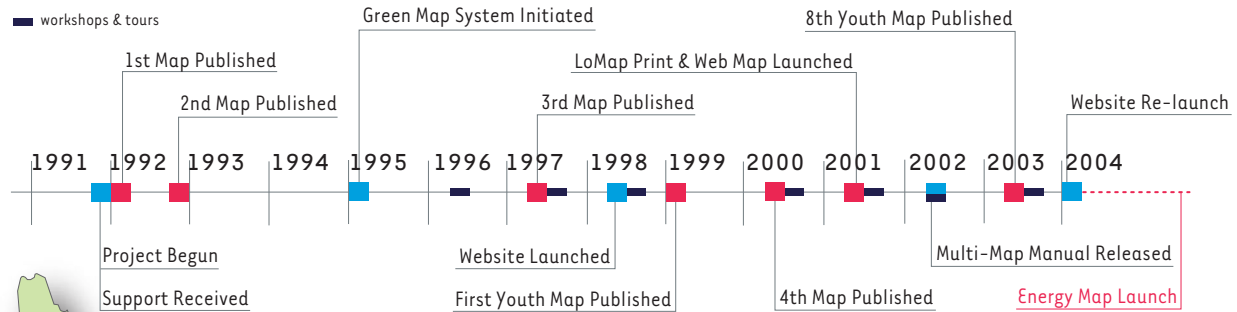
New York City · USA  
 Green Apple Map  
 www.GreenAppleMap.org



## New York City



Detail of LoMap (2001)



I love my city, yet always envisioned ways it could become a better, healthier place. So much about New York City was admired and celebrated, yet its environment was diminished and disconnected from daily life. How could we promote a more respectful, involved relationship with nature and green living?

While at a United Nations Earth Summit session, I had an inspiration: we could create a free map that charted NYC's community gardens, farmers markets, green shops, recycling sites and many more signs of progress toward sustainability. Maps communicate universally as they connect people to place — this one would invite a fresh perception of NYC, energizing awareness and caring for this unique urban environment. Practically overnight, the map had a name, donated printing and a network of fellow eco-designers to help research, produce and disseminate it. Just three months later, in March 1992, the original Green Apple Map made its debut!

My eco-design company, Modern World Design, also published the second citywide edition, which helped catalyze the development of the global Green Map System in 1995. When GMS separated from Modern World in 2000, the Green Apple Map (GAM) became the non-profit organization's local project. Today, we're working on our eleventh view of NYC's urban ecosystem.

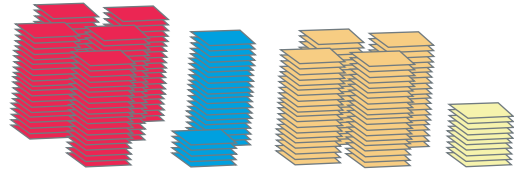
### Map Data

- Language: English
- Number of Map Editions: 5 citywide, 5 neighborhood maps
- Published Map Formats: Print, Website
- Number of Sites Charted: over 1000
- Number of Global Icons Used: 60



LoMap's logo includes Green Map Icons

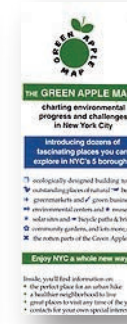
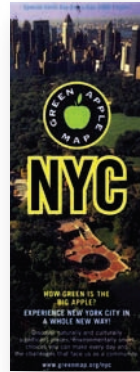
# Mapmaking



100,000 Green Apple Map (4) 25,000 LoMaps, 80,000 Green Apple Map (3) 10,000 Green Apple Map (1 & 2) printed

The third edition of the Green Apple Map was our first to use the newly minted global Green Map Icons. Our interest in influencing designers led us to contact *Metropolis* magazine — its coverage of sustainable design already reached a broad audience. I suggested partnering on GAM3, and we began working toward publishing 65,000 free copies in March 1997, to be distributed through events and schools, museums, libraries, tourist kiosks, the UN, parks, greenmarkets and gardens in NYC’s five boroughs. To keep up with requests, GAM3 was revised and reprinted a year later.

To develop the content, we mailed copies of GAM2 to groups and community leaders across the city, surveying what should be added from their neighborhoods. We interviewed experts in organizations and agencies, checked news archives and researched local nature, tourism, eco-resources and infrastructure. For some pollution data, we had to file an official “Freedom of Information Act” request. Along with fact checking,



(left to right)  
**Green Apple Map 4** (2000)  
**LoMap** (2001)  
**Green Apple Map 3** (1997)  
**Green Apple Map 2** (1992)  
 Youth mapmakers refer to our citywide map when making their own thematic or neighborhood Green Maps

ground-truthing (is a suggested site really where and as good as described?) and newer email and online site suggestion forms, these steps have strengthened each successive edition.

GMS’s collaborative framework and icons expanded our vision and GAM3 spotlighted 700 sites. Rather than featuring one borough (as in previous editions), New York was shown in true proportions, creating a balanced view of the whole city. *Metropolis’* art director, William van Roden, gave the map an invitingly composed landscape. Later on, GMS’s 2001 Lower Manhattan “LoMap” used a lively spectrum of color-coded icons to appeal to a younger audience. LoMap borrows Milwaukee Green Map colors and Copenhagen’s compact format — with their design, clear criteria and narratives, these two projects have certainly influenced our own. Actually, virtually every Green Map has!

## Technical Data

### Software:

- Adobe Illustrator
- Adobe Photoshop
- Quark
- FileMaker

### Hardware:

- Macintosh workstations
- Bicycles
- Digital cameras

### Paper:

- 30% to 100% recycled

### Map Structure:

#### Folding

- Green Apple Map 4: 63.5 X 43.2 cm / 25 X 17 in
- LoMap: 94 X 30.5 cm / 37 X 12 in
- Green Apple Map 2: 43.2 X 27.9 cm / 17 X 11 in

# Teamwork

New York City · USA  
**Green Apple Map**  
[www.GreenAppleMap.org](http://www.GreenAppleMap.org)

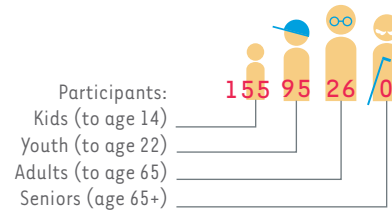
Fresh partners, team members and interns have shaped each edition of the Green Apple Map along with myself, Wendy Brawer, including:

- Hal Drellich, graphic designer and original project partner
- Susan Szenasy, *Metropolis* editor and GAM3 partner
- Beth Ferguson, 1998 intern to 2001 LoMap Project Coordinator (and Recycle A Bicycle's 2000 youth map coordinator)
- Dr. Robert Zuber, 1998–2003 GMS Education and Outreach Specialist (and his East Harlem church parish's map coordinator)
- Diana Signe Kline, graphic designer for LoMap
- Web designers Sara S. Tucker, Matthew Curlewis, Steven Doll, Asako Kondo and Bomee Jung

This community media vehicle gains much of its momentum from inspired, voluntary support — more credits are online.



Partners, Advisors and Board members: **17**



NYC is very diverse — eight million people, 36% foreign born. We endeavor to involve everyone by distributing free copies in every borough and encouraging youth groups to create their own maps, helping them become stakeholders in NYC's future. Youth often investigate and chart difficult issues, such as unjust siting of waste facilities, polluted waterways, even the relationship between asthma and air pollution. New York University students and Sierra Club members have made Green Maps, too. Not every project results in a published map but all NYC efforts are further described on our newly redesigned website.

We try to keep the local and global in balance when conceptualizing new maps, and sometimes pilot new methodologies to share with GMS's network. For example, we documented the youth nomination process developed for LoMap and produced a how-to manual (this "geo-story" is on Buckminster Fuller Institute's EarthScope website, [www.bfi.org](http://www.bfi.org)). Developing the strategy for each Green Apple Map is a joy.



<< NYC youth groups like Recycle A Bicycle visit GMS's office and exchange Green Mapping ideas

From left, Wendy Brawer >> and assistants, Aika Nakashima and Yasuhito Kanayama at work, spring 2003 (as seen in *Paper Sky* magazine)



Green Map System's office and staff, winter 2004

Gathering LoMap >> site nominations at the Greenmarket



Recycle A Bicyclers tour Greenpoint, Brooklyn with planner and GMS Board member, Carter Craft (on left)



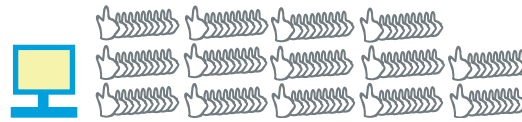


# Economics

New York City · USA  
 Green Apple Map  
[www.GreenAppleMap.org](http://www.GreenAppleMap.org)

The Green Apple Map project has thrived by staying small and flexible. Our longtime funder, NYC Environmental Fund, has been instrumental since 1997, when GAM was under the fiscal umbrella of the non-profit Architects, Designers and Planners for Social Responsibility. Greenacre Foundation has been a repeat funder, too. Our first map was sponsored by Municipal Art Society; we self-funded and sold the next edition; GAM3's first 65,000 copies were sponsored by Interface, Inc.; and in 2000, Earth Day New York sponsored GAM4's 100,000 copy press run. We're now seeking publication support for 2004's Energy-focused GAM. It's a challenge because we are also fundraising (and fund-stretching!) for GMS's global project.

GAM has benefited a wide range of places and people as more New Yorkers realize there is a plethora of effective ways to help green up the city. Some of our interns have gone on to co-lead local Green Map projects elsewhere, too.



Approximately **139,000** website visitors per year



Green Map Icons, as shown on Green Apple Map's 4th edition and LoMap



These icons are the common currency of all Green Maps



## Economic Data

**Type of Organization:** Non-profit

**Support:** Grants, private funding, in-kind

## Major Project Supporters:

- New York City Environmental Fund
- Greenacre Foundation
- Earth Day New York
- New York Community Trust
- Deutsche Bank Americas Foundation

**Number of Paid or Volunteer Jobs Created:** 5

**Cost of Map:** Free

**Spin Off Projects:** Green Apple Tours, postcards, youth mapping tools and manual for youth and community



(upper, lower) LoMap, the youth-authored Green Map of Lower Manhattan - [www.greenmap.org/lomap](http://www.greenmap.org/lomap). Green Apple Map's new website

# Assessment

New York City · USA  
 Green Apple Map  
[www.GreenAppleMap.org](http://www.GreenAppleMap.org)



NYC changes so quickly that one can easily envision a paradigm shift toward community-wide well being and long-term environmental health — our challenge is to help catalyze and actualize this shift. We want our maps to inspire personal recognition — the “aha” moment — that results in revitalization of our hometown. Media attention has amplified our work and helped us reach new audiences.

Another challenge we’ve faced is finding space to describe all the significant sites on one sheet of paper! After assessing the response to our 2000 comprehensive citywide edition, GAM5 will be our first to focus on a critical theme — Energy. Everything from practical power to cutting edge innovations (such as Central Park’s fuel cell powered police station) will be showcased through familiar Green Map Icons and categories. We’re planning to include photographs, charts and other visuals that grab attention, and we intend to post these online while the print map is in production. Our website [www.GreenAppleMap.org](http://www.GreenAppleMap.org) also includes



Helping Green Apple Maps reach a diverse audience, magazine coverage has included Australia’s *Design World* (June 95), Canada’s *Adbusters* (January 01), USA’s *Sphere* (00), Canada’s *Green Teacher* (Summer 99) and USA’s *Science World* (7 April 95)

travelogues, articles and neighborhood maps, along with background on the youth and community Green Maps created over the years.

Realizing GAM users needed more insight into site criteria, we began including qualitative information on our second edition — it’s less scientific, but more engaging and empowering for this map’s broad audience. Narratives about everyday choices we make — as shoppers, commuters, community members — promote readily available, preferable options. Toxics are presented as action items, paired with organizations involved with pollution prevention. While GAM has yet to formally convene an advisory board of experts, many are consulted during the research and editing phases. GAM has a wonderful Board of Directors helping shape GAM’s direction, too.



(upper, lower) Since 1999, Recycle A Bicycle’s summer programs have resulted in publication of five unique youth Green Maps. With its citywide and Manhattan views, the 1992 Green Apple Map sparked international attention that initiated the local-global Green Map System. 2003’s “How Green is YOUR Neighborhood?” postcard invites public site suggestions



## Conclusion

New York City · USA  
Green Apple Map  
www.GreenAppleMap.org



LoMap drawing by Edward

Mapping nature in New York seemed so improbable! GAM's unique perspective provides a view unlike any other map of this city. We have many favorite parts of the project:

- Bringing biodiversity to light — plotting the wealth of green and open spaces, including hundreds of vibrant community gardens, 60 waterfront parks and more.
- Providing resources to the separate but affiliated projects charting different aspects of the Green Apple, from expressive young neighborhood mappers to dedicated eco-organizations around town.
- Going "live" with Green Apple Tours that bring people and green sites together.
- Enjoying all the positive attention the project has received since Day One!

Even as the Green Apple Map provides a connection to the future, it has an unpredictable, organic path towards it. Including more languages, themes and mediums will help us reach more residents and visitors with every new edition — some

***"A Green Map is especially useful to seniors who want to visit the city without traffic and turmoil - and who also care about leaving a healthier planet for our children."***

– Rhoda Amon, *New York Newsday*, July 19, 1998

day, everyone will be investing personal energy into this thriving environment, actively greening the Apple.

**"The Green Map provides a new and vital way to look at and explore New York City."**

–Municipal Art Society Certificate of Merit, June 2001

**"Your map is perfect. We laminated two sets that we use again and again in the classroom."**

–Barbara Kushner-Kurland, Teacher Education Coordinator, Brooklyn Botanic Garden, 2003



The monthly Critical Mass traffic calming bike ride attracts hundreds of participants

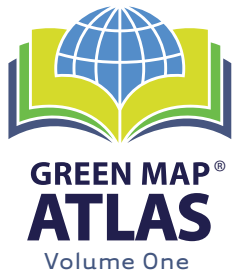


Regional farmers bring their produce to 28 outdoor Greenmarket locations in NYC each week. Lower East Side Park and its greenhouse are managed by youth.



Recycle A Bicycle's summer youth mapping project experiences a Brooklyn community garden





(left to right) The first Green Apple Tour in 1992 included Audubon's eco-smart headquarters. New York Harbor School students at the helm, learning about local waterways © Green Map System © Allison Newman 2003



The front and back of LoMap (2001)

## Credits

### New York's Story written by:

Wendy E. Brawer  
 Green Map System  
 PO Box 249  
 New York, NY 10002 - 0249  
 USA  
 tel: +1 (212) 674 1631

Locator globes and maps © Map Resources®. All rights reserved. All map, web and promo images © Green Map System

### Other Photos:

page 2) Beth Ferguson  
 page 3) GMS, Paper Sky, GMS, Beth Ferguson  
 page 5) Design World, Adbusters, Sphere, Green Teacher, Science World, Recycle A Bicycle 1999-2003  
 page 6) Peter Meitzler, GMS, Beth Ferguson, Regina Weir



<< Green Apple staff and volunteers illuminate an inviting path towards a sustainable NYC

## Want These Maps?

online: [www.GreenAppleMap.org](http://www.GreenAppleMap.org)  
 email: [info@GreenAppleMap.org](mailto:info@GreenAppleMap.org)  
 or visit the online store at [www.greenatlas.org](http://www.greenatlas.org)

[www.greenmap.org](http://www.greenmap.org) is your global link to every local Green Map project, multilingual Icon posters, an invitation to participate, and more.



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[info@greenmap.org](mailto:info@greenmap.org)



# HAKODATE

Green Mapmaking in Hokkaido Japan's Slow City



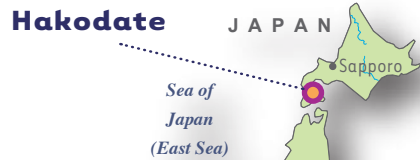
A project of the **Green Map System**: promoting sustainability and citizen action in communities around the world through locally created maps of the natural and cultural environment





# Introduction

Hakodate City · Hokkaido · Japan  
 Hakodate Slow Map  
 www.slowmap.org



Detail of the Hakodate Slow Map (2003)



Out of an interest in using information design to revitalize local communities, designer Yasushi Watanabe initiated an online group in 2000 to discuss possible activities. Making a Green Map seemed like it would be a useful way for Hakodate citizens to connect with their community, and open the way for developing many new projects in the process. Therefore, we set up a project team dedicated to creating Hakodate's Green Map.

We thought mapmaking would provide those concerned about community redevelopment with a good opportunity to share their knowledge and work together. Hakodate has many historic buildings, having had relatively early contact with foreign cultures during Japan's era of modernization. However, as residents have moved away from the city center, community ties have been lost. While there were many civic groups conducting ecological, community design and social welfare activities, they were not networked.

It took some time to organize people to create the Green Map. In 2002, the prefecture agreed to subsidize the project, and we began actual work on the map. We intended it to be used by citizens, tourists and people interested or engaged in community building, with the highest priority placed on citizens in terms of naming and designing the map.

## Map Data

- Language: Japanese
- Number of Map Editions: 1
- Published Map Formats: Print, Website
- Number of Sites Charted: 200
- Number of Global Icons Used: 53



Hakodate's four local icons



# Mapmaking

Hakodate City · Hokkaido · Japan  
Hakodate Slow Map  
www.slowmap.org



5,000 maps printed

Inspired by Green Map Japan's meeting in July 2002, we held our first workshop in Hakodate to display Green Maps to the public and begin data collection. In early 2003 we organized and edited the data, and designed the Green Map for print. We printed 5,000 copies, placing them at the Hakodate Tourist Information Center, museums, cafés and a community radio station. In March 2003 we launched the website [www.slowmap.org](http://www.slowmap.org) as Hakodate Green Map Version 1.0.

We use the term "slow" to make an impression on citizens and tourists. The worldwide "slow food" movement has focused many people on slower-paced living — and Hakodate provides a good environment for this. The process of mapmaking itself was intentionally slow, as we involved many people at different stages.

We tried to give the map the warmth of a children's picture book with a hand-drawn logo and bright colors. The character of Hakodate's old sector is illustrated



(left to right)  
**Hakodate Slow Map** printed edition (2003)  
Hakodate Slow Map homepage (2003)  
Drawing inspiration from other Green Maps at a "slow" workshop



afresh through the map. We included natural places such as Mt. Hakodate — rich in biodiversity — and a wildlife sanctuary for migratory birds. Also featured are revitalized buildings in the historic district. A leader in this trend, Hakodate began as early as the 1960s to concentrate on the effective use of local resources.

To announce the publication of the Green Map both in print and on our website, we invited citizens to a launch workshop. Participants discussed ways to use the map and offered critiques for future versions. Our next edition, Version 2.0, is planned for publication as a Japanese-language website in 2004.

## Technical Data

### Software:

Adobe Illustrator  
Adobe Photoshop  
Macromedia Flash MX  
Macromedia Dreamweaver  
Microsoft Excel

### Hardware:

Macintosh and PC workstations  
Digital camera  
Instant camera

### Paper:

Recycled paper with soy-based ink

### Map Structure:

Folding

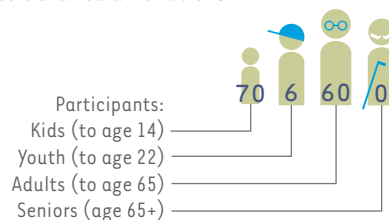
- A2 (59.4 X 42 cm / 23.4 X 16.5 in), folded into CD jacket size
- Website
  - Naview, Flash-based map information system for PC users

# Teamwork

Hakodate City · Hokkaido · Japan  
Hakodate Slow Map  
www.slowmap.org



Partners, Advisors and Board members: 6



Core members of the project included a planner, publishing consultant, website design director, event producer/desktop publishing executive and a graphic designer. Initially, all knew Yasushi Watanabe, the primary mapmaker. However, we undertook a participatory design approach, and many others took part in workshops held at different stages of the mapmaking process. To promote the workshop, we listed it in the local newspaper, gave out fliers, and made use of our group's mailing list.

Participants ranged from primary schoolchildren to senior citizens in their 60s, and they included university students, professors, city employees, NGO staff members and volunteers. Although no environmental experts were involved, we did obtain information from city environmental officers and active citizens. In conducting the fieldwork and conceptualizing this map, people in Hakodate have developed a fresh eye for their own town.

Among the contributors was a group of 70 third grade pupils in a primary school class studying pictograms. In the process of designing local icons, we approached them to help us create an icon for "Hot Spa and Public Bath House." From sketches drawn by the children, core members extracted common elements and designed the icon. University students majoring in information design also volunteered to help us sort the collected data and check the draft map.

Enjoying a Slow >>  
Map walking tour  
of Hakodate held  
in August 2003



<< Making friends and  
exploring the city during  
fieldwork for the Slow Map



Schoolchildren helped design new icons for the map by sketching their ideas



Adults and children work together to review sites during a Slow Map workshop

# Economics

Hakodate City · Hokkaido · Japan  
**Hakodate Slow Map**  
[www.slowmap.org](http://www.slowmap.org)

Our project was selected for the Hokkaido Prefecture Small Office/Home Office (SOHO) Support Scheme in 2002, and this subsidy covered half of the project expense. For the rest, we successfully obtained funding from a private foundation in Hokkaido and a council of local multimedia corporations. The budget for the project included funds for both the printed map and website, although we spent more on the print version. We paid fees to a graphic designer and website system engineer. The four core members, primary school contributors and university students were not paid.

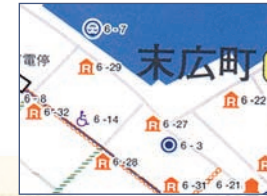
In order to make new versions of Hakodate's Green Map, we need to prepare a plan for continued activities as well as fundraising. We are exploring possible sources of governmental and private financial support. Fundraising for the printed version (to be published as a booklet) is a headache; however, prospects for the upgraded version of our website are bright.



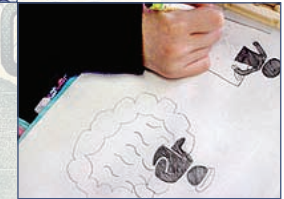
Approximately **14,400** website visitors per year



(upper, lower) Hakodate Slow Map web homepage  
 Detail of Hakodate's interactive Slow Map with pop-up features



Green Map Icons, as shown on Hakodate's Slow Map. Below, youth designing new local icons



These icons are the common currency of all Green Maps

## Economic Data

**Type of Organization:** Non-profit design network

**Support:**  
 Grants

**Major Project Supporters:**  
 Hakodate Multimedia Promotion Council  
 Hokkaido Regional Promotion Organization  
 Hokkaido Prefectural Government

**Number of Paid or Volunteer Jobs Created:** 2

**Cost of Map:** Free

**Spin Off Projects:** Tours, magazine column, digital photo collage, workshops



# Assessment

Hakodate City · Hokkaido · Japan  
**Hakodate Slow Map**  
[www.slowmap.org](http://www.slowmap.org)

(left to right)  
 An article in the *Hokkaido Shimbun* (March 03) announced the completion of the printed map. An article in the *Asahi newspaper* (October 02) reported on the first workshop



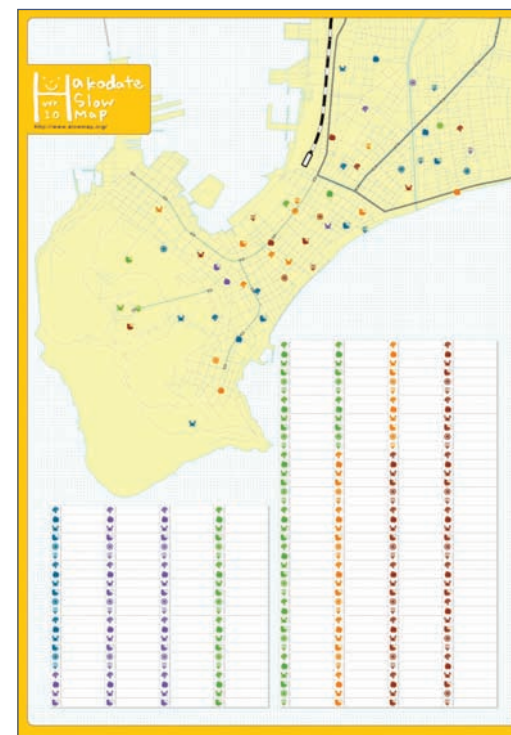
The Green Map released in 2003 on the website is a trial version. It covers only the historic district of Hakodate, the original core of the city, which is visited by five million tourists a year. Naview, an easy kind of GIS, is the mapping system used for the website.

From the beginning, we planned to develop a system through which users' contributions would be reflected on the Hakodate Slow Map website in real time. However, budgetary and technical constraints prevented us from realizing this concept on the initial website. Insufficient information and shortcomings in data structure made usability difficult for this version.

However, we have been working to solve these problems, and should be able to implement the system in early 2004. The new Slow Map website will be updated by citizens' and tourists' contributions, enabling inputs from PCs and mobile phones with a digital camera. Before long, a real "Map in Progress" will emerge. The

core team plus volunteers well versed in local culture and environment will edit data contributed by the public through the "Recommendation" page. We also plan to link points on the map with other related websites. For non-computer users, we will organize more rounds of fieldwork. These approaches will bring us closer to our purpose — to involve people in sharing their discoveries with others, and to build up the data.

Our map story was taken up by three local newspapers, two free newspapers, one industrial paper, two radio stations and two TV stations. It was also introduced in a few computer magazines.



(upper, lower) Information to be included on the Slow Map was selected and edited on a draft map. Example of design exploration for the map

## Conclusion

Hakodate City · Hokkaido · Japan  
Hakodate Slow Map  
www.slowmap.org

While following the Green Map System principles, the Hakodate Green Map added the additional concept of “slowness,” encouraging people to walk and discover the charms and hidden treasures of this historic city. We employed the term “slow” to express the character of the city, and consciously used the mapmaking process as an interface to connect many people.

Response from the public has generally been more favorable than expected. Workshop participants who collected data said that they had discovered Hakodate anew, and users were pleased with the different perspective on Hakodate offered by the map.

**“While looking at the Slow Map, I feel as if I can hear voices of many people from various spots on the map.”**

—Miki Aota, housewife, Hakodate

**“One year has passed since I moved to Hakodate. I tend to forget the slow and favorable atmosphere that I first found here.”**

**“I can add my discoveries onto the map, or create a map of my own. I will buy a plain map of my neighborhood, go out for a walk and fill it in.”**


– Hiroshi Masuyama, media producer, Tokyo

**With this map I feel like taking a leisurely walk around the city.”**

—Mihoko Nakai, broadcaster, NHK Hakodate

We plan to expand our activities into a partnership to revitalize the local economy and rehabilitate historic elements of the city. The core team from Hakodate Slow Map will collaborate with a construction consulting company and the municipal office on redeveloping Hakodate to make the most of the city’s historic assets.



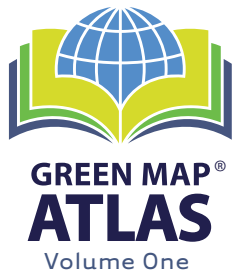
 Panoramic view of Hakodate City from the top of Mt. Hakodate. Tourists from all over Japan come to see the view at night



 This cemetery for foreign residents, located at the foot of Mt. Hakodate, is a famous spot to see the sunset on a clear day



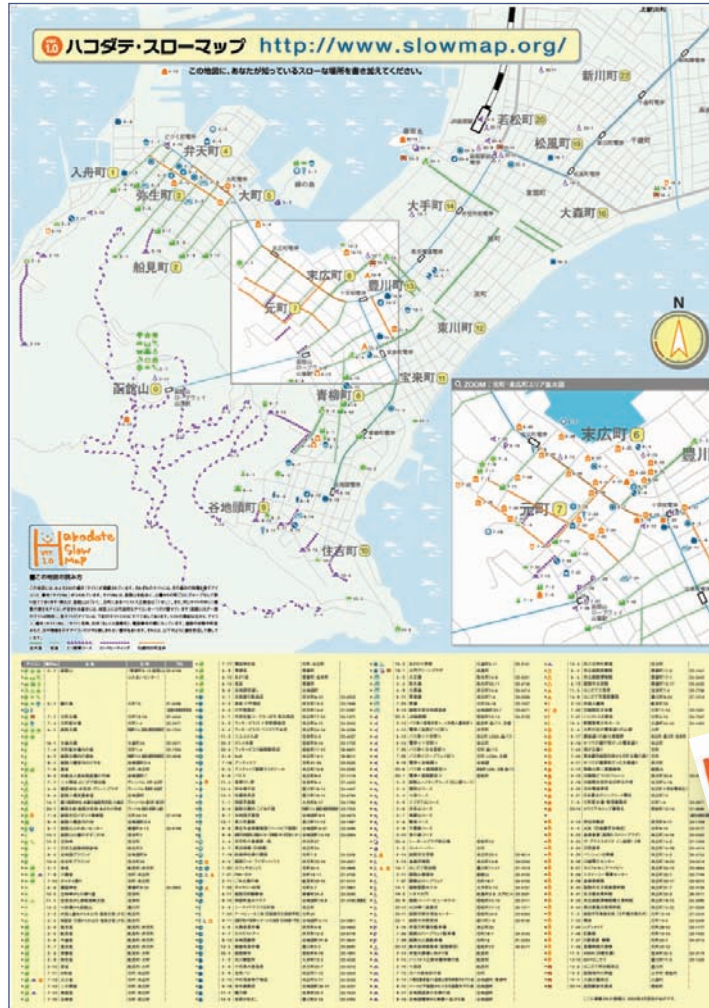
 Street cars, an ecologically efficient mode of travel, connect the major downtown areas



At this site, salted cuttlefish are processed in barrels using a traditional method



<< This hundred year old building, once a department store and city office, will be renovated for non-profit offices and community group use



Hakodate Slow Map (2003)

## Credits

### Hakodate's Story written by:

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 Hakodate Slow Map  
 5-8, Enomoto-cho  
 Hakodate-city  
 Hokkaido 042-0931  
 Japan  
 tel: +81 138-57-4640

Locator globes and maps © Map Resources®. All rights reserved. All map, web, promo images and photos © node 0138 project 2003



<< A flea market held several times a year helps make reuse more fashionable. Antique brick storehouses are in the background



## Want This Map?

email: [info@slowmap.org](mailto:info@slowmap.org)  
 or visit the online store at  
[www.greenatlas.org](http://www.greenatlas.org)

[www.greenmap.org](http://www.greenmap.org) is your global link to every local Green Map project, multilingual Icon posters, an invitation to participate, and more.



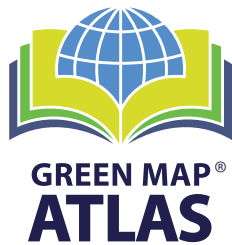
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[info@greenmap.org](mailto:info@greenmap.org)





# MILWAUKEE

Green Mapmaking along the USA's Great Lakes

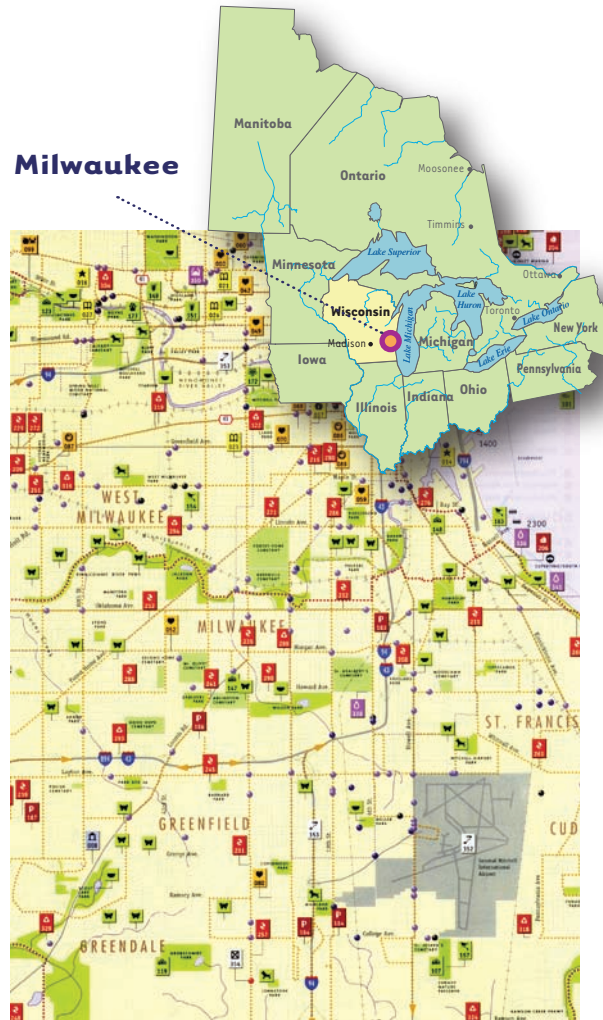


A project of the **Green Map System**: promoting sustainability and citizen action in communities around the world through locally created maps of the natural and cultural environment

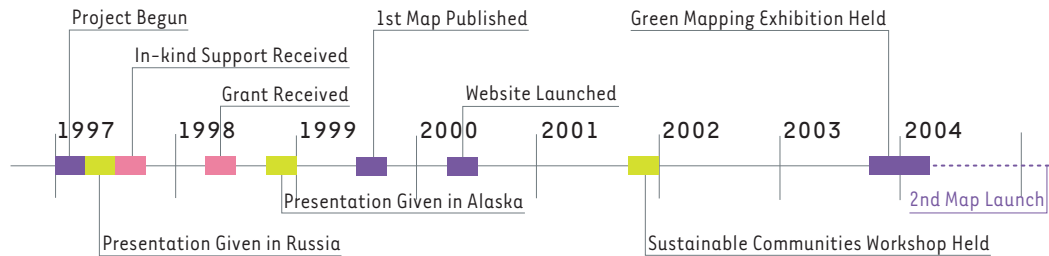


# Introduction

Milwaukee · Wisconsin · USA  
 Milwaukee Green Map  
[www.wisconline.com/greenmap/milwaukee](http://www.wisconline.com/greenmap/milwaukee)



Detail of the Milwaukee Green Map (1999)



Although I had lived in an urban place for many years, I wasn't entirely convinced that cities were healthy or environmentally sound places to live. Having grown up in rural Wisconsin, I felt I needed evidence that there was something sustainable about a city like Milwaukee.

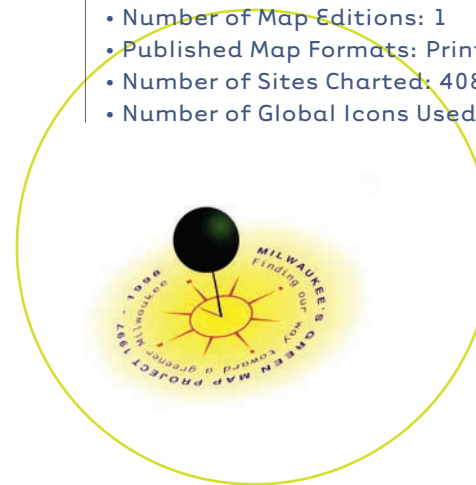
In March of 1997 I saw a magazine article detailing the New York Green Apple Map, and got excited about its potential here. My project at the time, urbaNature, was meant to communicate urban living as a natural process, and I thought the Green Map System would be a perfect way to show people what was going on here.

As much of my work as an information designer was with environmental NGOs, I knew of many concerned people in Milwaukee. But I wondered if they were aware of what other groups were doing. Starting this project was a way to reveal connections, increasing the momentum.

The Milwaukee Green Map Project was really a personally motivated art work — an information design task that reflected my own interests in this place. When you make a map, you can see everything that's happening, and I think that's the beauty of it.

## Map Data

- Language: English
- Number of Map Editions: 1
- Published Map Formats: Print, Website
- Number of Sites Charted: 408
- Number of Global Icons Used: 60

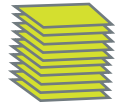


# Mapmaking

Milwaukee · Wisconsin · USA

## Milwaukee Green Map

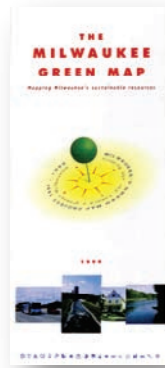
[www.wisconline.com/greenmap/milwaukee](http://www.wisconline.com/greenmap/milwaukee)



10,000 maps printed

The map looks the way it does because of my own personal sensibility as an information designer. I wanted a densely layered map, using the Green Map Icons as a gateway into bigger ideas. So I included maps of the watershed, population density, historic green space and more on the reverse side, showing how this interconnectedness can reveal sustainability. The sweetness of the map is that this simple visual tool can link into a network that is hugely complex.

For clarity, I kept the map lighter in color, and tried to balance text and images. It was difficult fitting everything in when nearly every site came with an incredible story. I prioritized by considering basic, everyday needs: clean drinking water, waste management, food resources. I also included aesthetic considerations such as green space and light pollution—which, for example, not only wastes energy but also diminishes the night sky. Almost every site meshes together aesthetics, social, economic and environmental impacts.



(left to right)

### The Milwaukee Green Map (1999)

Postcard publicizing the exhibit “Green Mapping: Information design as a tool for social change”

Matthew Groshek addressing participants from 14 countries at the first Global Green Mapmakers Meeting in 2002



Differences between computer platforms set many design parameters for this project. The base map was in a Macintosh-compatible Adobe Illustrator format, which I quickly realized could not handle GIS maps contributed by community groups. I placed hundreds of GIS locations by hand, which I would hope to avoid doing with the next map.

MGMs were free to educational institutions and sold through nature centers, bookstores and the local food co-op. Approximately half the 10,000 printed maps were distributed, although sadly the remaining maps were inadvertently recycled! Currently, conversations are underway with an anonymous donor to start a second edition.

## Technical Data

### Software:

Adobe Illustrator  
Adobe Photoshop  
FileMaker Pro  
Cadtools  
Avenza MAPublisher

### Hardware:

Macintosh workstation  
Flatbed scanner  
35mm camera  
Printer

### Paper:

Halopague, 100% recycled (20% post consumer)

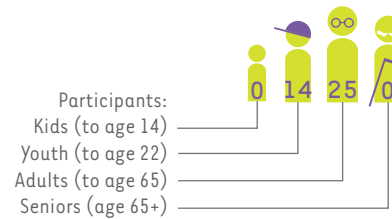
### Map Structure:

Folding  
· Map: 86.4 X 55.9 cm / 34 X 22 in



# Teamwork

Milwaukee · Wisconsin · USA  
**Milwaukee Green Map**  
[www.wisconline.com/greenmap/milwaukee](http://www.wisconline.com/greenmap/milwaukee)



Although I attempted to form partnerships early on, the vision for collaboration changed as the project proceeded. I thought a clear buy-in from partners was necessary, but many NGOs I knew seemed overworked already. So instead I sought out information bits from different groups—for example a transportation plan from Citizens for a Better Environment—and also asked them to suggest sites for the map. The Center for Urban Initiatives and Research (CUIR) at the University of Wisconsin/Milwaukee also provided feedback and some neighborhood GIS mapping.

I have been influenced by many other mapping projects, but the MGM was ultimately a personal assessment of my community. Although this may seem exclusionary, it can be a powerful perspective too. I realized that by educating myself, I could share this with others through the map. Some places just seemed appealing, such as resale shops. Milwaukee is well known for its scavenger

mentality, and there's a healthy sense of competition here having to do with salvage and thrift.

I felt that scientific, quantifiable criteria would not have communicated enough about the quality of the place we live. A Green Map is always a cultural portrait, hard to measure but not always hard to chart. People sometimes think that if you're not from a disenfranchised group you don't have anything to say about the place you live. I don't believe that's true — when the environment is compromised, everyone is disenfranchised.

22 international Green >>  
 Mapmakers presented their projects at the Rockefeller Foundation's conference center in Bellagio, Italy



<< Isabelle Duvivier, Mapmaker from Santa Monica, California, exchanged ideas with Matthew about map design



A 2003 exhibit at Cardinal Stritch University presented the Milwaukee Green Map and other maps from around the world



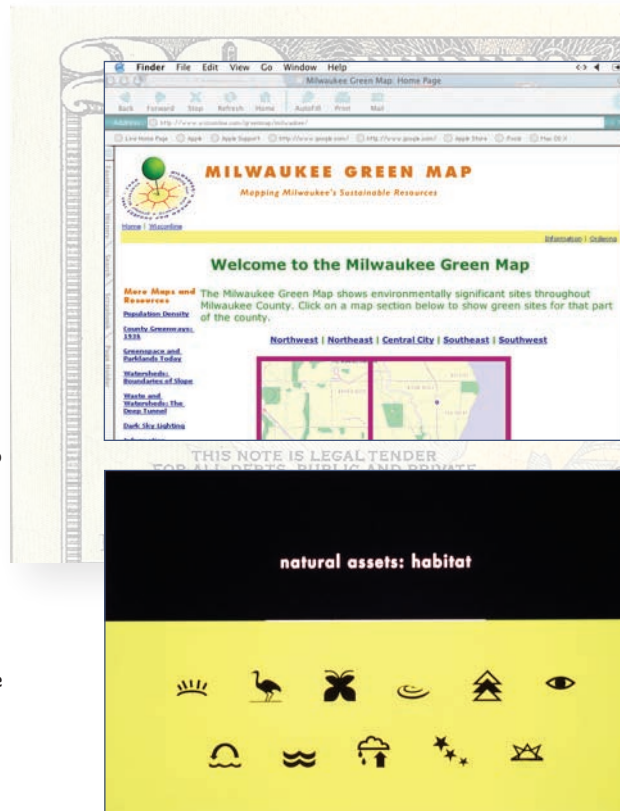
Large Green Map Icons gave the public a taste of how information design can increase awareness of social issues

# Economics

Milwaukee · Wisconsin · USA  
**Milwaukee Green Map**  
[www.wisconline.com/greenmap/milwaukee](http://www.wisconline.com/greenmap/milwaukee)

'People resources' such as data collection and checking came through university internships, high school groups and environmental centers. Many people volunteered their skills, including database and website construction. I also received \$5000 from the Harry F. and Mary Franke Idea Fund, disbursed through The Park People. That money re-paid people for services initially donated, such as large-scale digital outputs. I volunteered my time, spending about 5-10 hours per week. Though I planned on six months, the project took nearly two years, and would have cost about \$50,000 at market rates.

Near the end, I gave an interview about the MGM and mentioned needing donated printing services. Two days after the article came out, Sells Printing Company called and offered to print 10-15,000 copies. An environmentally-conscious company, they avoid using wasteful negatives through a filmless electronic process, and also use soy-based inks and recycled paper, and conserve other resources. Without this generous



(upper, lower) The MGM website targets visitors to Milwaukee, with the hope that they will use the map to discover the sustainable resources of the region. Images of this kind were used to introduce the Green Map Icons, and show how they reveal complex ideas simply to varied audiences

donation, the map would have remained stuck in my computer — where it had been for four months already — with no way to give it to people.



Green Map Icons, as shown on Milwaukee's map

These icons are the common currency of all Green Maps



## Economic Data

**Type of Organization:** Individual

**Support:** Grants, in-kind, sponsorship

**Major Project Supporters:**  
 Milwaukee Foundation  
 Harry F. and Mary Franke Idea Fund  
 Sells Printing Company  
 Bradner Smith and Company of Wisconsin

**Cost of Map:** \$5, but free to educational groups

**Spin Off Projects:** Presentations, workshops and exhibitions

# Assessment

Milwaukee · Wisconsin · USA  
Milwaukee Green Map  
[www.wisconline.com/greenmap/milwaukee](http://www.wisconline.com/greenmap/milwaukee)



(left to right) The MGM was featured in several publications including *Milwaukee Magazine* (October 99) and *New Trends in World Design* (January 01). A *Milwaukee Journal Sentinel* article (March 99) was instrumental in obtaining donated printing for the map. Coverage also included pieces in the "Outpost Exchange" newsletter (April 01) and *Lapin*, a Japanese magazine.

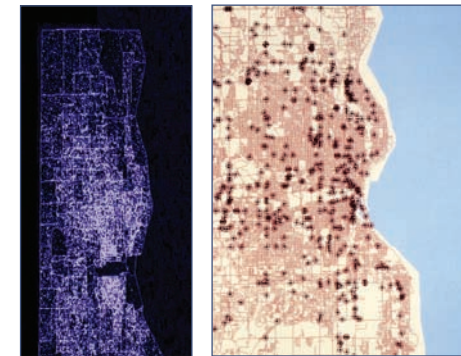
One of the greatest challenges was simply deciding when the map was complete. Another was communicating the value of the map before it was made. The NGO community runs a tight economic line when it comes to projects without direct benefit, yet the map is an easy way of raising consciousness about sustainability. Communities need a language that allows non-specialists to communicate with experts, and these maps can help start that dialogue.

Milwaukee's link to GMS gave the project credibility, as well as the power of networked global thinking. Showing that people all over the world are doing this, using the Green Map Icons, gives you leverage. It has increased the professional credibility of my firm, Education Design Link, too.

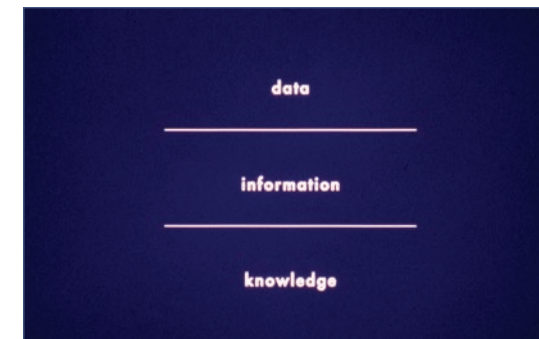
There were some local press articles, but most coverage has been global rather than local. Recently I designed an exhibit called "Green Mapping: Information design as a tool for social change" at

Cardinal Stritch University, which has generated a renewed interest in the MGM project. People were made aware of the global scope of Green Maps, and were impressed by their number, quality, and regional diversity.

The size of my original map may be too big — I like the idea of people walking around with maps in their pockets. Another drawback was that it might not have reached beyond those who were already pretty environmentally conscious. It did, however, fit nicely into the general attitude here about green building, sustainable city planning and other environmentally sound practices and services. Hopefully, the next MGM can reflect these changes while celebrating thoughtful living.



(left, right) An inset map of population density appears next to a map of light pollution on the MGM, making an illuminating comparison. This GIS map was used as a reference to locate "Remediation and Redevelopment" sites



The foundation of the project was the idea that, through interpretation and careful selection, data becomes information, which is then transformed into useful, place-based knowledge





## Conclusion

Milwaukee · Wisconsin · USA  
Milwaukee Green Map  
[www.wisconline.com/greenmap/milwaukee](http://www.wisconline.com/greenmap/milwaukee)

The supplementary maps on the reverse side connect GMS to other mapping ideas, and make the Milwaukee Green Map project unique. The personal approach to mapmaking also distinguishes this project from many other Green Maps.

For the second version of the Green Map I'll try to get more community support, a team of people to help develop the process. I would also find a writer for the text and have a stronger web presence, with images of people and their stories revealing a deeper sort of narrative. Also, a print map is still valuable because of its beauty as a printed object.

My favorite part of the project is connecting with many different people locally, and also globally. The Global Green Mapmakers Meeting in Bellagio, Italy was an incredible chance to meet colleagues from 14 countries, and I was impressed to see how they could work with community partnerships.

Green Mapping has been an exceptional

***“When I first started my position, I used the map as an essential resource to increase my background knowledge of the Milwaukee River Basin and identify priority areas to focus on.”***

– Kimberly Gleffe, Director, River Revitalization Foundation

experience, bringing home the strengths of civic involvement and the power of information design.

***“Groshek set out to answer his family’s questions about why anyone would want to live in Milwaukee and ended up creating a road map to the community’s progressive side.”***

—Shelly Jarenski, Outpost Exchange, April 2001

***“The Milwaukee Green Map is a phenomenal resource for connecting people to their environmental community.”***

—Ken Leinbach, Executive Director, Urban Ecology Center



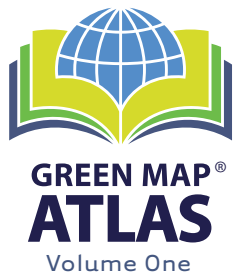
∞ Landscape restoration such as the prairie and oak savannahs at Wehr Nature Center remind visitors of Wisconsin’s pre-settlement features



❄️ Even in winter, the Lake Michigan shoreline provides breathtaking scenery and recreational opportunities such as biking, walking and cross-country skiing



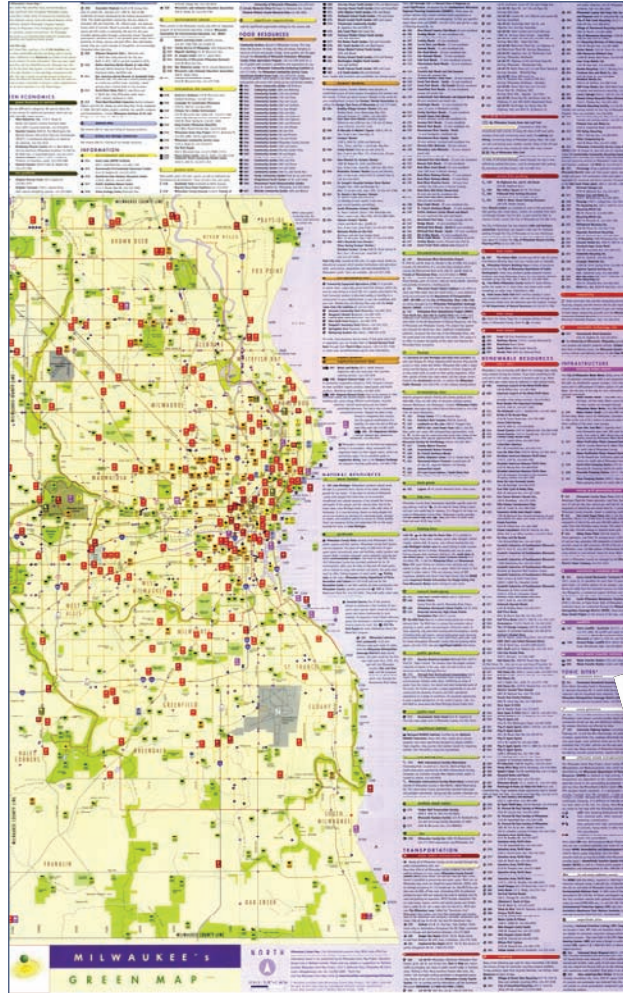
🌊 The Milwaukee River, where recreation once competed with wastewater disposal, has returned to a wildlife habitat and fishing/canoeing destination in recent years



<< The Schlitz Audubon Nature Center has become a showcase for green building practices in Milwaukee



An environmental corridor for countless animals and plants, the Milwaukee River also offers its bounty to other determined locals



Milwaukee Green Map (1999)

## Credits

### Milwaukee's Story written by:

Matthew Groshek

Education Design Link

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USA

tel: +1 (414) 962-4888

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## Want This Map?

online only: [www.wisconline.com/greenmap/milwaukee](http://www.wisconline.com/greenmap/milwaukee)  
questions? [edimg@execpc.com](mailto:edimg@execpc.com)

[www.greenmap.org](http://www.greenmap.org) is your global link to every local Green Map project, multilingual Icon posters, an invitation to participate, and more.



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# TORONTO

Green Mapmaking in Canada's MegaCity



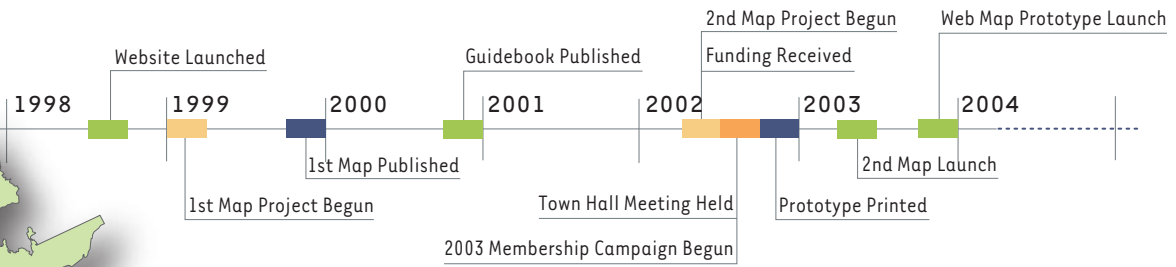
A project of the **Green Map System**: promoting sustainability and citizen action in communities around the world through locally created maps of the natural and cultural environment





# Introduction

Toronto · Ontario · Canada  
 The *OTHER* Map of Toronto  
 www.greentourism.ca



Detail of The *OTHER* Map of Toronto (2003)

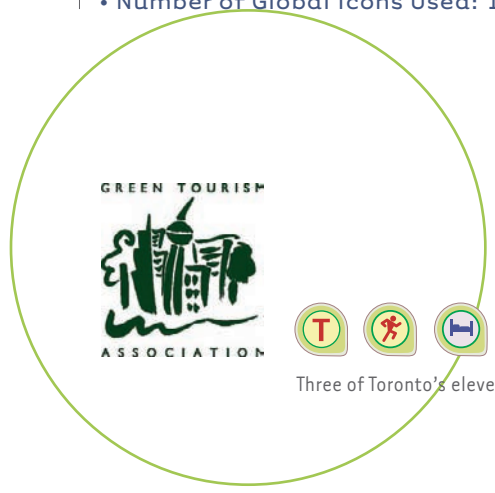
In 1999, the Green Tourism Association produced the first edition of The *OTHER* Map of Toronto to provide urban green tourism information and options to visitors and residents of Toronto. It was one of the first Green Maps to connect tourism with the environment. Sixty thousand copies were printed and distributed in less than two years. Tremendous interest and demand from around the globe motivated the Green Tourism Association to produce the second edition of the map — which was launched on Earth Day, April 22, 2003.

The *OTHER* Map of Toronto provides a comprehensive source of information linking tourists and residents to the many urban green tourism experiences the city and region have to offer. It takes a celebratory tone, informing people about the many adventures and activities available in the city. Pollution hotspots, garbage dumps and other blight sights are not identified on the map. Rather, we encourage a positive image and

message that effectively engages tourists and residents with Toronto's rich urban ecology and cultural diversity.

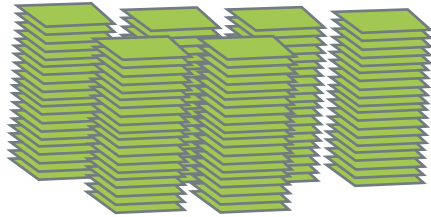
## Map Data

- Language: English
- Number of Map Editions: 2
- Published Map Formats: Print, PDF, Poster
- Number of Sites Charted: 196
- Number of Global Icons Used: 16



Three of Toronto's eleven local icons

# Mapmaking



120,000 maps printed (60,000 distributed in 6 months)

The *OTHER* Map of Toronto was designed to be as functional as a typical city map in terms of getting around, but with a more organic, down-to-earth feel for the user. It highlights walking and biking trails, parks and gardens, conservation areas, green accommodations and businesses, restaurants and cafés, ecotour operators and sustainable transportation, local galleries and theatres, museum and heritage sites, and organic and natural food locations.

This second edition of the map captured the best design features of the first edition, and improved weak elements that were identified through feedback from the public, our members and partners. The first prototype was presented at the Global Green Mapmakers Conference in Bellagio, Italy, then 'shopped around' for input over the next three months.

During this time, our membership campaign was in full swing and map listings and location points were geocoded and entered into our database,



(left to right)  
The *OTHER* Map of Toronto - final and draft version (2003)  
The *OTHER* Map of Toronto (1999)  
Touring Toronto with the Green Map



which now includes over 1,000 potential listings. We worked with several departments at the City of Toronto, Toronto and Region Conservation and local transportation operators to obtain GIS data for parks, waterways, transit networks, cycling routes and recreational trails.

As we were finalizing the content and map design, major technical difficulties arose just weeks before the launch date. The map's file had become so large that even major print houses were unable to handle it. Many people pitched in, working long hours for several weeks, and fortunately the map was published just in time for its public debut. 120,000 copies were printed and are being distributed free at over 100 locations throughout the city. Map information and a list of distribution locations are available at [www.greentourism.ca](http://www.greentourism.ca). Outside of the Greater Toronto Area, map requests can be sent to [info@greentourism.ca](mailto:info@greentourism.ca).

## Technical Data

### Software:

ESRI ArcView  
FileMaker Pro  
Adobe InDesign  
Adobe Illustrator  
Adobe Photoshop

### Hardware:

Pentium 4 Class Graphic Workstation  
GIS workstation  
PC workstation  
Bicycles

### Paper:

New Life Satin ST (EcoLogo certified)  
30% post-consumer fibre and  
70% elemental chlorine-free virgin fibre  
Waterless printing process

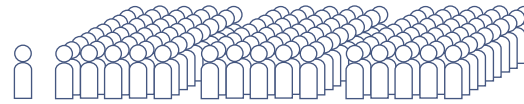
### Map Structure:

Folding

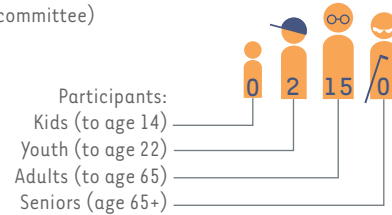
- First map: 91.4 X 66 cm / 36 X 26 in
- Second map: 91.4 X 67.3 cm / 36 X 26.5 in

# Teamwork

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 The *OTHER* Map of Toronto  
[www.greentourism.ca](http://www.greentourism.ca)



Partners, Advisors and Board members: **151**  
 (includes subcommittee)



The second edition of The *OTHER* Map of Toronto was produced in collaboration with many individuals and organizations — we couldn't have done it without them. The Green Tourism Association team included Justin Lafontaine (General Manager), Sandra Farias (Database and Information Coordinator), Vivian Lord (Membership Coordinator), Teresa Riczu (Marketing and Communications Coordinator) and members of the map subcommittee and Board of Directors. An intern was hired to geocode data and act as GIS point-person between our office, Toronto and Region Conservation and the graphic designers.

Public participation in the development of the map created a representative reflection of Toronto's world-renowned diversity. Over 40 people attended a Green Map 'Town Hall' meeting held at the beginning of production. This was an opportunity for the public, Association members, partners and sponsors to share their ideas and comments about the

design, layout and content of the new edition. New map features discussed at the meeting included the watershed inset map, a grid reference system and photos of green tourism sites and activities. The map subcommittee was formed at the 'Town Hall' event and worked to guide the project to completion. The success of the first edition helped us develop and grow new partnerships, sponsorships and key support for the second edition. After the map was published, we sent a project update email to the GMS listserv highlighting our project, map launch and distribution. Several Green Mapmakers from around the world have contacted us for information about the map's development, media reach, tracking, distribution, community support and urban green tourism. Maintaining comprehensive tracking systems for requests and feedback is beneficial in acquiring funding for subsequent editions of the map and other initiatives.

Over 120 people attended >> the map launch held in the green Fairmont Royal York Hotel



<< Green Tourism Association team and board members (left to right: Jesse Redditt, Justin Lafontaine, Teresa Riczu, Rachel Dodds, Anna Gibson, Thomas Rohricht, Brian Jamieson, Vivian Lord, Sandra Farias and Joan Miles)



Green Tourism Association staff copy editing the map prototype (left to right: Teresa Riczu, Sandra Farias and Justin Lafontaine)



<< At local community events, staff and volunteers promote the map, guidebook and the Association (left to right: Aliya Ladha and Vivian Lord)



# Economics

Toronto · Ontario · Canada  
 The *OTHER* Map of Toronto  
 www.greentourism.ca

The *OTHER* Map of Toronto was produced with generous contributions from our key supporters, sponsors, members and partners, who provided essential project funds and services including: office space and equipment; salaries and general office expenses; graphic design, paper and printing; distribution and mailing; information tracking, data acquisition and database development; event space and catering; advertising, promotion and PR; and legal services.

Collaborating with many community members and partners and offering them an opportunity to be part of the project ensured the map's success. Businesses and organizations listed on the map are members of the Green Tourism Association and paid a fee to support the map's production, or were listed because they provide important urban green tourism information and resources to the community. Our membership, sponsorship and partnership networks are being further developed to ensure long-term financial sustainability of the



Approximately **47,000** website visitors per year



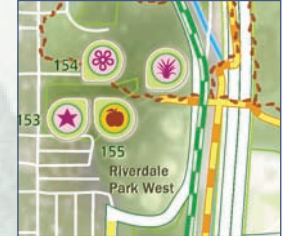
(upper, lower) The Green Tourism Association website  
 Early prototype of the Green Tourism web map interface

organization, subsequent editions of the map and other urban green tourism initiatives.



Green Map Icons, as shown on Toronto's first and second editions

These icons are the common currency of all Green Maps



## Economic Data

**Type of Organization:** Non-profit

**Support:**

Grants, in-kind, sponsorship, membership fee

**Major Project Supporters:**

- The Government of Canada
- The City of Toronto-Urban Development Services
- The Ontario Trillium Foundation
- Toronto and Region Conservation
- Tourism Toronto

**Number of Paid or Volunteer Jobs Created:** 6

**Cost of Map:** Free

**Spin Off Projects:** Guidebook, website

# Assessment

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[www.greentourism.ca](http://www.greentourism.ca)



(left to right) Map launch generated over 45 press articles including *Metro* (22 April 03) and the *Toronto Sun* (25 May 03 and 23 April 03); Map launch invitation; Promotional postcard distributed at events and conferences; 'The *OTHER* Guide to Toronto,' the first known urban ecotourism guidebook

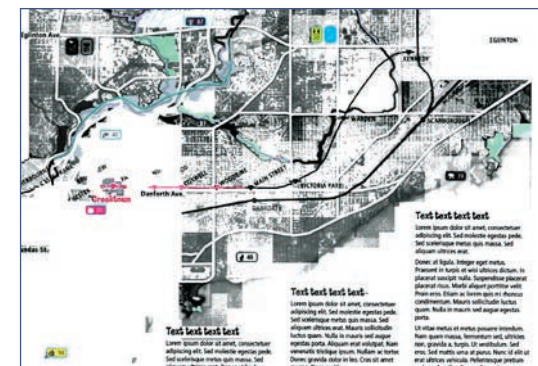
The second edition of the map was launched at the Fairmont Royal York Hotel on Earth Day 2003. During the launch week, VIA Rail Canada distributed 5,000 maps to passengers aboard Toronto bound trains, and maps were quickly snapped up at over 100 distribution locations. Six months after the launch, over 60,000 copies had been distributed and over 45 media articles (print, TV and radio) were generated with a reach of approximately 5 million people. The map benefits from its connection to the internationally recognized Green Map System, and we continue to receive positive feedback, evaluations and requests daily from around the world. Many have inquired about our membership.

As with all projects of this size and scope, we faced several challenges during the production of The *OTHER* Map of Toronto, including maintaining current data for map listings, acquiring many 'layers' of data from several sources and dealing with major technical difficulties in the final phase of production. In the end,

the map has been a great success and an effective showcase for sustainable tourism.

To join the Green Tourism Association as a member, a business or organization must sign a pledge and identify the urban green tourism initiatives that they are undertaking related to the following categories:

- **Environmental Responsibility:** protecting, conserving and/or enhancing nature and the physical environment to ensure the long-term health of the ecosystem.
- **Local Economic Vitality:** supporting local economies, businesses and communities to ensure economic vitality and sustainability.
- **Cultural Sensitivity:** respecting and appreciating cultural diversity to ensure the continued well-being of local or host cultures.
- **Experiential Richness:** providing enriching experiences through active, personal and meaningful involvement with nature, people, places and cultures.



(upper, lower) Front of the first edition of The *OTHER* Map of Toronto and an early prototype of the second edition

## Conclusion

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The *OTHER* Map of Toronto  
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The second edition of The *OTHER* Map of Toronto incorporates new features including a Greater Toronto watershed inset map, photo panel of urban green tourism sites and attractions, and improved design and user-friendliness. We have received great interest and positive feedback from both tourists and residents:

***"This map will enable the novice as well as those who like to explore. Enjoy a more adventurous side of Toronto!"***

– Michael Persaud, Tourism Toronto

***"We give them out for free at Grassroots – and customers love it! We're always refilling the basket because they disappear so quickly."***

– Kathy Raddon, Grassroots Environmental Products


The second phase of the map project is now under way, with the development of a green tourism web map. The map will be dynamically linked to our database for automatic updates and greater

***"The information you provide coincides with how I see myself as a tourist, traveller and citizen. It helps me do my part to reduce the impact I have on the environment."***

– Kelly Zorzi, Moving the Economy

exposure for our members, partners and sponsors. As with the print map, the web map will foster an increased awareness of sustainable tourism options in the city. Urban green tourism increases the quality of life for tourists by offering them appealing, environmentally responsible and locally focused options, and promotes longer stays. It also increases the quality of life for local residents through increased awareness and the development of a green tourism industry that revitalizes the local economy, making the community more livable.




 Cityscape view from the Toronto Islands, a car-free archipelago of 15 islands easily accessible by ferry from downtown

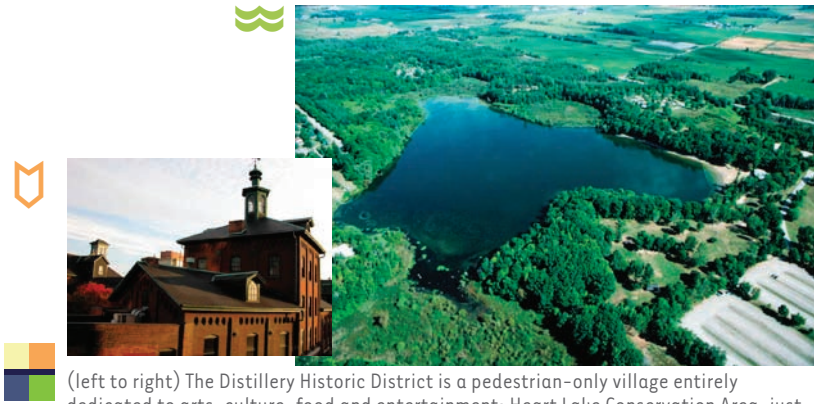
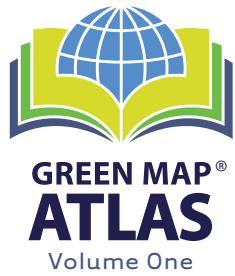


 The Humber River Pedestrian Bridge spans this Canadian Heritage River, connecting the waterfront and Humber Valley recreational trails



 Trinity Square Park Labyrinth, based on an ancient pattern for meditative walking, provides a break from the downtown hustle and bustle





(left to right) The Distillery Historic District is a pedestrian-only village entirely dedicated to arts, culture, food and entertainment; Heart Lake Conservation Area, just outside the city, feels like it's hours away © Hal Swann © TRCA-R. Hasner

## Credits

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 page 6) clockwise from top: © TRCA — R. Hasner, Anne Tanner, TRCA — R. Hasner



<< Staff and friends celebrating the completed Green Map © GTA



## Want This Map?

online: [www.greentourism.ca](http://www.greentourism.ca)  
 email: [info@greentourism.ca](mailto:info@greentourism.ca)  
 or visit the online store at  
[www.greenatlas.org](http://www.greenatlas.org)

[www.greenmap.org](http://www.greenmap.org) is your global link to every local Green Map project, multilingual Icon posters, an invitation to participate, and more.



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# Behind the Stories

## Choices and Authors



With so many exemplary projects in Asia and North America, it was difficult to determine which to include in this first volume. The Atlas Working Group created a decision matrix reflecting our network's diversity and comparing:

- uniqueness of the process/result
- local support and planning for ongoing development
- thoroughness in charting sustainability resources
- contributions to the local community and the Green Map network
- ease of accessing copies of featured Green Maps

Since future volumes will cover other world regions or themes, eventually every great Green Map Story will be featured in the Atlas series. We are grateful for the thoughtful reflections provided by all the Mapmakers introduced here.

### Story Authors



Wendy E. Brawer  
NEW YORK CITY

Eco-designer, artist and networker. Happy founding director of Green Map System and creator of the original Green Apple Map.



Matthew Groshek  
MILWAUKEE

Amateur beekeeper, information designer and principal of Education Design Link, an information design firm centered on community and sustainable living.



Masahiro Horiuchi  
TOKYO

Initiator of community design projects, teacher at Tama Art University. Studied architecture and urban planning in Japan and United States.



Marco Kusumawijaya  
JAKARTA

Architect and urban planner by training. As a journalist, Marco covers urban issues in Indonesia.



Justin Lafontaine  
TORONTO

With a BA in Urban Studies from Concordia University, Justin loves travel, community and the environment.



Mac Legerton &  
Patricia Locklear  
ROBESON COUNTY

Center for Community Action's Executive Director and Director of Sustainable Communities Program, respectively.



Shoichiro Sendai  
HIROSHIMA

Born in Kyoto, currently Hiroshima University Associate Professor of History and Theory of Architectural Landscape Design.



Anand Upalekar  
PUNE

Practicing architect, planner and GIS consultant to Pune Municipal Corporation. Trekker and Earth watcher with an unsatiated quest.



Yasushi Watanabe  
HAKODATE

Freelance writer, planning director and chief researcher on future community design at the Collaborative Knowledge Laboratory in his hometown, Hakodate.



Misako Yomosa  
KYOTO

Director of Tennen Design Forum, Co-representative of Green Map Japan and Co-founder of Librairie Gallia Shobo Ltd.



**“As a dematerialised product (PDF), a digitised product (CD-ROM) and a locally printed edition, the Atlas enables individuals to access it in the most appropriate way.”**

— Alastair Fuad-Luke, author of *The Eco-Design Handbook*, UK



- A Peta Hijau Jakarta  
Peta Hijau Menteng
- B Green Map of Pune  
Green Map of Central Pune
- C Hiroshima Ecopeace Map  
2003  
現代編  
Contemporary Edition
- D The Prospect Green Map  
The Red Springs Green Map
- E Kyoto Green Map  
Kyoto Bicycle Map
- F Tokyo Nagomi Map  
Setagaya Green Map
- G Green Apple Map 4  
LoMap of Lower Manhattan
- H Hakodate Slow Map
- I The Milwaukee Green Map
- J The *OTHER* Map of Toronto

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Inside the Green Map Atlas find 350 photographs and map views, including these Green Maps