

# Planting Ideas

ACTION GUIDE

Based on the documentary

## Taking Root: The Vision of Wangari Maathai

“It is the people  
who must save  
the environment. It  
is the people who  
must make their  
leaders change.  
And we cannot be  
intimidated. So we  
must stand up for  
what we believe in.”

—WANGARI MAATHAI





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“Why not plant trees?’ I asked the women. And the women said, ‘Well, we would plant trees, but we don’t know how.’ And that started the whole story of ‘Okay let’s learn how to plant trees.’”

—WANGARI MAATHAI

## THE ROOTS OF THIS PROJECT

### A Note From the Filmmakers

We hope that you are as inspired as we are by Wangari Maathai. Her love for Kenya, her stewardship of the environment, and her holistic approach to change compelled us to make this film!

This step-by-step guide is meant to honor you and what you know about your neighborhood. We've included a variety of activities, tips, and resources—serious and fun—ideal for everyone.

Use what interests you most and brings you joy.

#### LISA MERTON AND ALAN DATER



“No matter how small, no matter what you are, you can make a difference.”

—NGORONGO MAKANGA  
Co-founder, Green Party of Kenya



### About the Film

Produced and directed by Alan Dater and Lisa Merton, ***Taking Root: The Vision of Wangari Maathai*** weaves a compelling and dramatic narrative of one woman's role in the turbulent political and environmental history of her country. Founder of the Green Belt Movement that began in Kenya, Wangari Maathai is the first environmentalist and first African woman to win the Nobel Peace Prize. Maathai discovered her life's work by reconnecting with the rural women with whom she had grown up. They told her they were walking long distances for firewood, clean water was scarce, the soil was disappearing from their fields, and their children were suffering from malnutrition. “Well, why not plant trees?” Maathai suggested. These women found themselves working successively against deforestation, poverty, ignorance, embedded economic interests, and government corruption, until they became a national political force that helped bring down Kenya's 24-year dictatorship. ***Taking Root*** is an awe-inspiring profile of Maathai's courageous journey to protect the integrally connected issues of the environment, human rights, and democracy.

[www.takingrootfilm.com](http://www.takingrootfilm.com)



## The Green Belt Movement

The Green Belt Movement is a highly successful grassroots organization that encourages rural women and families to plant trees in community groups. Based in Kenya, its mission is to empower communities worldwide to protect the environment and to promote good governance and cultures of peace. Wangari Maathai founded the movement in 1977 to address the challenges of deforestation, soil erosion, and lack of water by the simple act of planting trees. By protecting the environment women are made powerful champions in the sustainable management of scarce resources such as water, equitable economic development, good political governance, and ultimately, peace. To date, more than 40 million trees have been planted across Kenya, thousands of acres of indigenous forests are being restored and protected, and hundreds of thousands of women and their communities have stood up for their rights to live healthier, more productive lives.



Ideas  
Into Action



# LOOK AROUND YOUR NEIGHBORHOOD

## The Trees in Your World

Look around your neighborhood as you go about your day. Whether you're on foot, on the bus, in the car, or on a commuter train, observe the location, size, crown, leaves, and textures of the different trees.

Do you have a favorite tree?

Which ones give out a scent?

How do trees make you feel?

What parts of your neighborhood or town don't have trees? Why?

What are the names of the trees you see?

- |                             |                         |                      |
|-----------------------------|-------------------------|----------------------|
| American Elm                | Box Elder               | Chinese Tallow Tree  |
| American Sweet Gum          | Brazilian Pepper Tree   | Chitalpa Tree        |
| Apple Tree                  | Bronze Loquat           | Coast Live Oak       |
| Apricot                     | Cabbage Palm            | Coast Redwood        |
| Arbutus 'Marina'            | California Black Oak    | Colorado Spruce      |
| Asian Pear                  | California Buckeye      | Common Catalpa       |
| Atlas Cedar, Atlantic Cedar | California Fan Palm     | Coral Tree           |
| Australian Tea Tree         | California Pepper Tree  | Cork Oak             |
| Australian Willow           | California Walnut       | Crape Myrtle         |
| Autumn Purple Ash           | Camphor Tree            | Dawn Redwood         |
| Bailey Acacia               | Canary Island Date Palm | Douglas Fir          |
| Big Leaf Maple              | Canary Island Pine      | Eastern Redbud       |
| Birch                       | Carob, St. John's Bread | English Hawthorn     |
| Black Locust                | Carolina Laurel Cherry  | English Walnut       |
| Black Maple                 | Cedar of Lebanon        | European Beech       |
| Black Mulberry              | Chinese Elm             | European Hackberry   |
| Black Acacia                | Chinese Flame Tree      | European Olive       |
| Blue Gum Eucalyptus         | Chinese Fringe Tree     | European White Birch |
| Blue Oak                    | Chinese Hackberry       | Evergreen Dogwood    |
| Blue Palmetto               | Chinese Photinia        | Evergreen Pear       |
|                             | Chinese Pistache        | Fern Pine            |

“As a small young girl there was a huge tree that was near our homestead. And next to our tree was a stream. My mother told me, ‘Do not collect firewood from the fig tree by the stream.’ I said, ‘Why?’ And she said, ‘Because that tree is a tree of God.’”

—WANGARI MAATHAI

- |                           |                         |
|---------------------------|-------------------------|
| Fig Tree                  | Japanese Persimmon      |
| Flaxleaf Paperbark        | Japanese Red Pine       |
| Flowering Ash             | Jelocote Pine           |
| Flowering Crab Apple      | Kotusa Dogwood          |
| Flowering Plum            | Lawson Cedar            |
| Giant Sequoia             | Lemon Bottlebrush       |
| Glossy Privet, Wax Tree   | Lemon Tree              |
| Goldenrain Tree           | Lime Tree               |
| Grapefruit Tree           | Little-leaf Linden      |
| Grecian Laurel, Sweet Bay | Loquat                  |
| Holly Oak                 | Magnolia delavayi       |
| Honey Locust              | Maidenhair, Ginkgo Tree |
| Horsetail Tree            | Mandarin Tree           |
| Idaho Locust              | Mediterranean Fan Palm  |
| Incense Cedar             | Mexican Fan Palm        |
| Italian Cypress           | Mexican Palo Verde      |
| Italian Stone Pine        | Modesto Ash             |
| Jacaranda                 | Monterey Cypress        |
| Japanese Black Pine       | Monterey Pine           |
| Japanese Maple            | Moraine Ash             |
| Japanese Pagoda Tree      | Moreton Bay Fig         |

- |                                 |
|---------------------------------|
| Nectarine Tree                  |
| Nepal Camphor                   |
| New Zealand Tea Tree            |
| Norway Spruce                   |
| Orange Tree                     |
| Ornamental Pear                 |
| Paperbark Maple                 |
| Peach Tree                      |
| Pecan                           |
| Persian Parrotia                |
| Pin Oak                         |
| Pineapple Guava                 |
| Pioneer Elm                     |
| Plum                            |
| Plume Cedar                     |
| Pluot                           |
| Ponderosa Pine                  |
| Queen Palm                      |
| Raywood Ash                     |
| Red Horsechestnut               |
| Red Ironbark                    |
| Red Maple                       |
| Red Oak                         |
| Red-flowering Gum               |
| Sago Palm                       |
| Saucer Magnolia                 |
| Scarlet Maple                   |
| Scarlet Oak                     |
| Shumard Red Oak                 |
| Siberian Elm                    |
| Silk Oak                        |
| Silk Tree                       |
| Silver Dollar Gum               |
| Silver Linden                   |
| Soapbark Tree                   |
| Southern Magnolia               |
| Strawberry Tree                 |
| Striped Maple                   |
| Sugar Maple                     |
| Tree-of-Heaven                  |
| Trident Maple                   |
| Tulip Tree                      |
| Tupelo, Black Gum               |
| Turkey Oak                      |
| Valley Oak                      |
| Variiegated Hollywood Juniper   |
| Vine Maple                      |
| Weeping Willow                  |
| Western Juniper, Sierra Juniper |
| Western Redbud                  |
| White Fir                       |
| White Mulberry                  |
| Windmill Palm                   |
| Yew Pine                        |



## Look At Trees Online

In the comfort of your home or library, check out your neighborhood on Google maps:

- △ Go to [maps.google.com](https://maps.google.com)
- △ Type your address in the search bar and locate your neighborhood on the map.
- △ To get a bird's eye view of the tree canopy, click on the "aerial" option.
- △ Click and drag the mouse around different parts of town.
- △ Do you notice a difference in canopy cover in different neighborhoods?



## Connect With Others Online

Use a sketchbook or grid notebook to:

- △ Express your thoughts and record your observations about trees.
- △ Keep samples of leaves and pressed flowers.
- △ Make sketches and/or paste in photos of favorite trees.

## Keep a Tree Journal

- △ Create a free, personalized blog about trees through websites like [www.blogspot.com](https://www.blogspot.com) or [www.wordpress.com](https://www.wordpress.com).
- △ On Facebook, environmental forums, or other social-networking sites, search for tree groups and enthusiasts all over the world.
- △ Visit [www.takingrootfilm.com](https://www.takingrootfilm.com) to drop us a line about the film and about your neighborhood tree efforts.

△ Arbor Day Foundation has an easy-to-use online tree ID guide at: [www.arborday.org/trees/whattree/](https://www.arborday.org/trees/whattree/).

△ Community colleges, tree nurseries, nonprofit organizations, and community gardens offer urban forestry classes.



connect with others  
express your thoughts  
keep samples  
make sketches

## PLANT MORE TREES

### Guidelines and Resources

Plant It.

Inspired to plant your own tree?

Great!

△ Possible locations include your yard, the tree strip in front of your house, or a local park.

△ Choose a tree that gives back to your community. Fruit trees, flowering trees, native trees, drought tolerant trees, or bird and wildlife habitat trees, bring many benefits.

△ Water, sunlight and soil quality affect a tree's wellbeing. The organizations and websites on the following pages offer tips on tree selection, planting, and maintenance.

△ Try to obtain permission before planting a tree outside of your private property.

△ [www.tree-planting.com](http://www.tree-planting.com)

Excellent step-by-step ideas about how to choose and plant trees.

## The Case for Indigenous Trees

Indigenous (native) trees are tree species that have evolved within the climates and ecosystems of a particular place. Trees imported from other places can become uncontrollable, and they compete for nutrients, water, and sunlight with indigenous trees.

By planting indigenous (native) trees you:

△ Link them to the vast web of life—bacteria, fungi, plants, and animals—that has depended on one another for eons.

△ Create better homes for birds and wildlife.

△ Reduce demands of watering.

△ Help prevent aggressive weeds from spreading.

△ **Guerilla Tree Planting** Kemba Shakur founded Urban Releaf in 1998 when she first moved to the neighborhood of West Oakland in California's Bay Area and found "Not a single tree on the block!" One year, Urban Releaf wanted to plant 600 trees but local agencies denied permission for all but eight trees. In resistance, the Urban Releaf crew went directly to community members to help plant "guerilla trees" wherever they could. Despite the importance of tree-planting many small organizations like Urban Releaf run into obstacles. To learn more about overcoming resistance visit: [www.urbanreleaf.org](http://www.urbanreleaf.org)





## Right Tree in the Right Place

“Trees bring rain. When they sway in the wind they purify the air. When the leaves drop to the ground, they hold the soil no matter how hard it rains. I was sure planting trees was good for my needs. I give young men lumber to build their houses, too.”

—NAOMI KABURA MUKUNU  
Chairperson, Kirangari Mwireri Women’s Group

Incorporating trees into the dense urban fabric can be a challenge. The key is to plant the “right tree in the right place.”

- △ During storms strong winds can topple healthy trees and destroy property.
- △ Tree branches can brush against power lines and cause blackouts and fires. Power companies advocate “downsizing” to shorter-growing trees.
- △ Non-native blue gum eucalyptus and acacia can accumulate mass and cause fires in hot, dry climates.
- △ Trees with large surface roots will cause sidewalks to buckle. According to the Center for Urban Forest Research, tree root damages cost Californians \$70 million annually in sidewalk damage and injuries.







“We said if you plant a tree and the tree survives, the movement will compensate you. And this motivated the women. So they started very, very, very small. And before we knew, the tree nurseries just started mushrooming.”

—WANGARI MAATHAI





“This tree no longer called for respect. It no longer inspired awe and it no longer was protected. They had cut it. Sure enough, the stream had also disappeared. And if the stream dies, the frog eggs, the tadpoles, the frogs, and everything else that lived in those waters disappears, and we can no longer go there to fetch the water.”

—WANGARI MAATHAI

## Trees in the City

Studies show that planting trees in urban areas:

- △ Makes streets more walkable
- △ Reduces crime
- △ Saves energy and water bills
- △ Improves air and water quality

For more information about the benefits of urban trees utilize your local library or publications from these organizations:

**Center for Urban Forest Research**  
[www.fs.fed.us/psw/programs/cufr/](http://www.fs.fed.us/psw/programs/cufr/)

**USDA Forest Service Field Office**  
[www.fs.fed.us/contactus/regions.shtml](http://www.fs.fed.us/contactus/regions.shtml)

**County Resource Conservation District**  
<http://www.nacdnet.org/about/districts/directory/index.phtml>

The Green Belt Movement reminds us that everyone has the right to a healthy environment in which to live and that everyone has the right to be a part of the decisions that affect his and her livelihood and well being. The Green Belt Movement also reminds us that it is both our right and our responsibility to find ways out of the “wrong bus syndrome.”



## JOIN SPADES

### Finding and Working with Tree Allies

Not sure where to start? Join a tree-planting project or look for a nonprofit or government agency organizing a tree campaign. Consider becoming a member, volunteer, or staff member of a local group. These organizations lead ongoing tree campaigns and offer resources on caring for trees:

#### ARBOR DAY FOUNDATION

A national organization chock-full of resources for members and non-members alike, including a step-by-step tree ID guide, great tree care tips and newsletters, a nature education program for kids, and a list of 87 tree programs in 37 states across the US. Find one near you!

[www.arborday.org](http://www.arborday.org)  
888 448 7337

#### AMERICAN FORESTS

The oldest volunteer conservation organization in the country restores forests and greens urban areas. Join their reforestry efforts, read *American Forests* magazine, or ask a Tree Doctor questions. Their CITYgreen mapping software calculates the benefits of trees in your city!

[www.americanforests.org](http://www.americanforests.org)  
202 737 1944

#### U.N. ENVIRONMENTAL PROGRAM

##### Plant for the Planet: The Billion Tree Campaign

This worldwide effort, inspired by Wangari Maathai's work, aims to plant a billion trees annually by engaging communities, governments, industries, and businesses. On their website you can enter a tree-planting pledge and record the number of trees you plant.

[www.unep.org/billiontree/campaign/howtoplant/index.asp](http://www.unep.org/billiontree/campaign/howtoplant/index.asp)

#### GREEN BELT SAFARIS

The Green Belt Movement (GBM) invites groups and individuals to participate in "Plant for Kenya," a community tree-planting program.

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



## BRANCH OUT FOR SUPPORT

In *Taking Root*, Wangari Maathai expresses concern with the disappearance of forests and the drying up of streams that are so essential to the health of communities. If you have a tree-related concern about your neighborhood, share it with other people. If a tree effort doesn't already exist, create a core group of interested neighbors.

### Meet Up

The first meeting can be informal—perhaps a screening of *Taking Root* in someone's living room. Use the film to start a discussion and grow a movement from the bottom up. Download screening tips at [www.takingrootfilm.com](http://www.takingrootfilm.com) and don't forget the popcorn!

△ Brainstorm ideas for cool tree projects you want to start or get involved in.

△ Identify tree-related and other community issues that are important.

△ Make connections between your issues. Then start small. Identify one concrete thing you can accomplish as a group.



## Map the Facts

Making a neighborhood tree map can be a particularly fruitful group and educational activity. A tree map helps identify and prioritize what you can do in your own community.

### Step 1

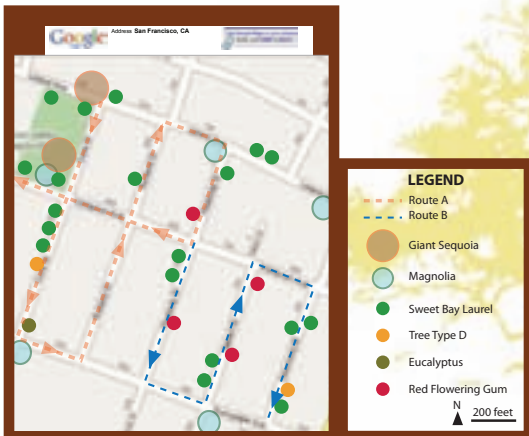
#### Decide on parameters

- △ Determine the area and criteria (type, condition, and location) to be used as the basis for your tree map.

### Step 2

#### Make a “base map”

- △ Print a street map of your neighborhood from Google maps or Mapquest, or photocopy any map that will easily fit on a clipboard.
- △ Work out a route to take and create teams of 2–3 people to cover a small area.



### Step 3

#### Take a group walk

- △ Give everyone an active role in the project.
- △ On your map note the locations and conditions of the trees in your neighborhood. Include trees in backyards, wherever possible.

### Step 4

#### Take photographs and detailed notes

- △ Record the relationship of trees to people and buildings.
- △ Note the areas of shade and sun.
- △ Convey how trees contribute to the general atmosphere of the neighborhood.

### Step 5 Create a “master base map”

- △ Regroup after your walk and create a master base map and legend to organize your findings.
- △ Represent the different parameters in a legible way with different colors, icons, and useful tags.



“The more I looked into the environment, the more I realized that what we were complaining about were the symptoms. And we needed to understand the causes of those symptoms.”

—WANGARI MAATHAI

## THE WISDOM OF WANGARI MAATHAI

Wangari Maathai’s tree planting efforts grew into civic education and her message evolved into big-picture concepts like democracy and governance. Below are some of her core philosophies:

### Connect tree issues to community concerns.

In Kenya, the disappearance of trees is connected to the drying up of streams, loss of source of firewood, malnutrition of children and many other life and death issues. What does the absence or loss of trees mean to your community?

### Connect local issues to regional and national issues.

Wangari Maathai links problems in her local community to the national problems caused by Moi’s dictatorship, the commoditization of natural resources, and the colonial legacy in Kenya that eroded traditional values which had protected the environment. What issue in your community is rooted in a national—or global—issue?

### Connect issues to systemic causes.

Understanding how local networks work—and don’t work—can help you identify effective solutions. Identify three different local issues and establish how they are related to one another.

#### △ Build On Your Efforts

**Write Your Representatives**

Once you have done your research, voice your concerns. Elected representatives and newspaper editors appreciate hearing from informed citizens!

**Tell Others**

Promote your work in the form of flyers, e-mail, and presentations.

A peaceful demonstration is another way to draw attention to your cause.

**Be Patient, Be Committed**

Don’t be discouraged if you meet resistance. As Wangari Maathai advised the women in her environmental education workshops, “...move wisely as the serpent always staying calm like the dove.”





“The little, little, grassroots people, they can change this world.”

—LILIAN NJEHU, Kanyariri Mother’s Union Tree Nursery







### △ Taking Root Mini-Grants

In the spirit of Wangari Maathai and the Green Belt Movement, the Taking Root team is offering modest mini-grants to community groups, nonprofits, and individuals for tree-related activities. For details and an application go to [www.takingrootfilm.com/take-action](http://www.takingrootfilm.com/take-action).

*Taking Root: The Vision of Wangari Maathai* is a feature-length documentary film by Alan Dater and Lisa Merton. For more information visit [www.takingrootfilm.com](http://www.takingrootfilm.com). For educational and institutional purchase visit [www.newday.com](http://www.newday.com).

△ Printed on recycled paper with soy-based inks.

## COMMUNITY PARTNERS



## FOR EDUCATORS

Free *Taking Root* standards-based lesson plans and video modules for high school and community college educators are available at ITVS Community Classroom. [pbs.org/independentlens/classroom/](http://pbs.org/independentlens/classroom/)

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## CREDITS

**Writer** Jane Wardani

**Editor and Katahdin Director of Outreach**

Daven Gee

**Taking Root Outreach and Distribution Manager**

Rebecca Rueter

**Design and Production** Margaret Tedesco

**Printing Consultant** Perry-Granger & Associates

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TAKING ROOT  
Marlboro Productions  
P.O. Box 96  
Marlboro, VT 05344  
<http://takingrootfilm.com>



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