Growing Potential, Stewards, and Policy for a Thriving Urban Forest

by Brad Lancaster

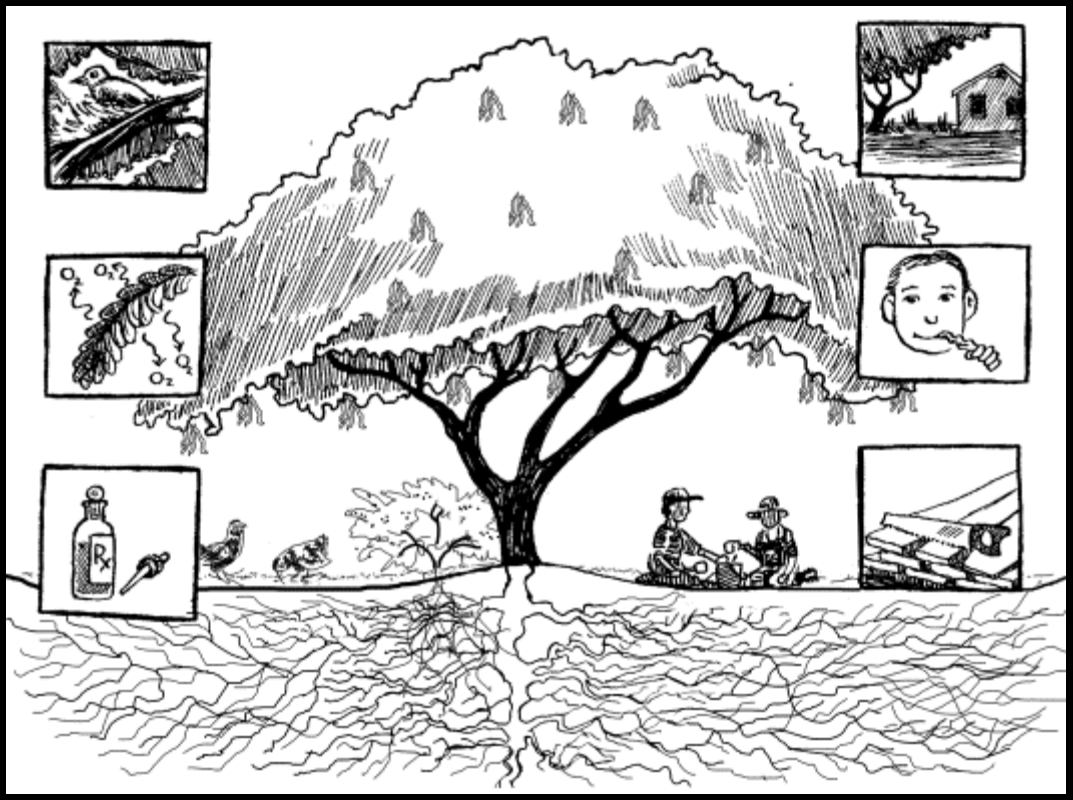
www.DesertHarvesters.org

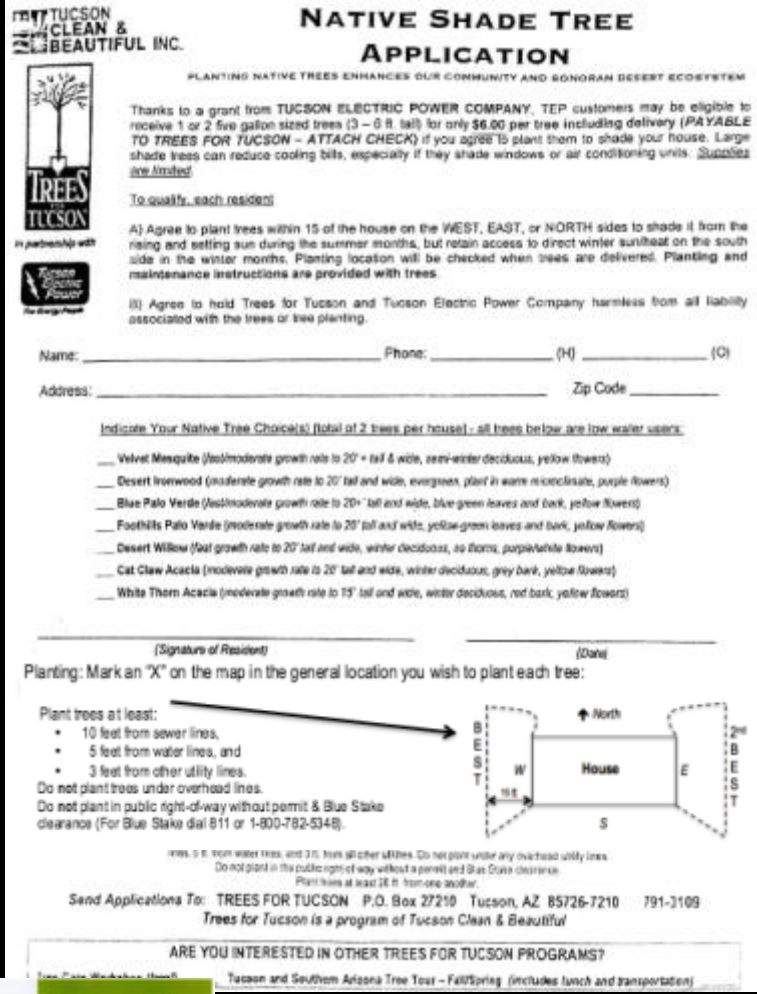
www.HarvestingRainwater.com

1994
Plant an imported tree, then import costly irrigation water & fertilizer

2015
Plant a multi-use native tree; and plant the free on-site rain, fertility, & community

Plant Multi-Use Trees





TUCSON CLEAN & BEAUTIFUL INC.

NATIVE SHADE TREE APPLICATION

PLANTING NATIVE TREES ENHANCES OUR COMMUNITY AND SONORAN DESERT ECOSYSTEM

TREES FOR TUCSON

in partnership with

Tucson Electric Power

Thanks to a grant from **TUCSON ELECTRIC POWER COMPANY**, TEP customers may be eligible to receive 1 or 2 five gallon sized trees (3 – 6 ft. tall) for only **$6.00 per tree including delivery** (*PAYABLE TO TREES FOR TUCSON – ATTACH CHECK*) if you agree to plant them to shade your house. Large shade trees can reduce cooling bills, especially if they shade windows or air conditioning units. Supplies are limited.

To qualify, each resident:

A) Agree to plant trees within 15 of the house on the WEST, EAST, or NORTH sides to shade it from the rising and setting sun during the summer months, but retain access to direct winter sun/heat on the south side in the winter months. Planting location will be checked when trees are delivered. **Planting and maintenance instructions are provided with trees.**

B) Agree to hold Trees for Tucson and Tucson Electric Power Company harmless from all liability associated with the trees or tree planting.

Name: _____ Phone: _____ (H) _____ (C)

Address: _____ Zip Code _____

Indicate Your Native Tree Choice(s) (total of 2 trees per house) - all trees below are low water users:

___ **Velvet Mesquite** (*fast/moderate growth rate to 20' + tall & wide, semi-winter deciduous, yellow flowers*)
___ **Desert Ironwood** (*moderate growth rate to 20' tall and wide, evergreen, plant in warm microclimate, purple flowers*)
___ **Blue Palo Verde** (*fast/moderate growth rate to 20+' tall and wide, blue-green leaves and bark, yellow flowers*)
___ **Foothills Palo Verde** (*moderate growth rate to 20' tall and wide, yellow-green leaves and bark, yellow flowers*)
___ **Desert Willow** (*fast growth rate to 20' tall and wide, winter deciduous, no thorns, purple/white flowers*)
___ **Cat Claw Acacia** (*moderate growth rate to 20' tall and wide, winter deciduous, grey bark, yellow flowers*)
___ **White Thorn Acacia** (*moderate growth rate to 15' tall and wide, winter deciduous, red bark, yellow flowers*)

_____ (*Signature of Resident*) _____ (*Date*)

Planting: Mark an "X" on the map in the general location you wish to plant each tree:

Plant trees at least:
- 10 feet from sewer lines,
- 5 feet from water lines, and
- 3 feet from other utility lines.

Do not plant trees under overhead lines.
Do not plant in public right-of-way without permit & Blue Stake clearance (For Blue Stake dial 811 or 1-800-782-5348).

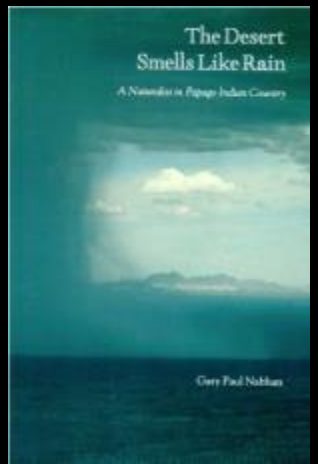
North
BEST
W
House
E
2nd BEST
S

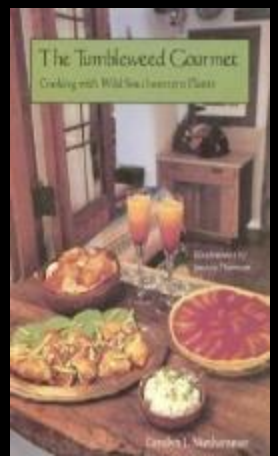
Trees 5 ft. from water lines, and 3 ft. from all other utilities. Do not plant under any overhead utility lines.
Do not plant in the public right-of-way without a permit and Blue Stake clearance.
Plant trees at least 28 ft. from one another.

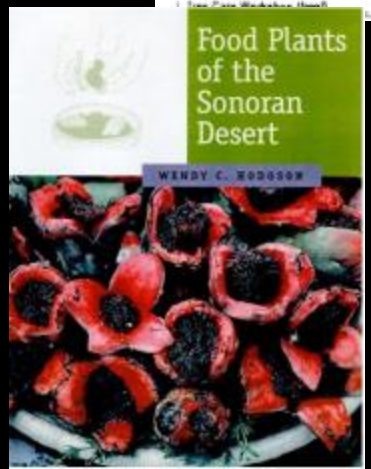
Send Applications To: TREES FOR TUCSON P.O. Box 27210 Tucson, AZ 85726-7210 791-3109
Trees for Tucson is a program of Tucson Clean & Beautiful

ARE YOU INTERESTED IN OTHER TREES FOR TUCSON PROGRAMS?

Tucson and Southern Arizona Tree Tour – Fall/Spring (*includes lunch and transportation*)







Plant Community

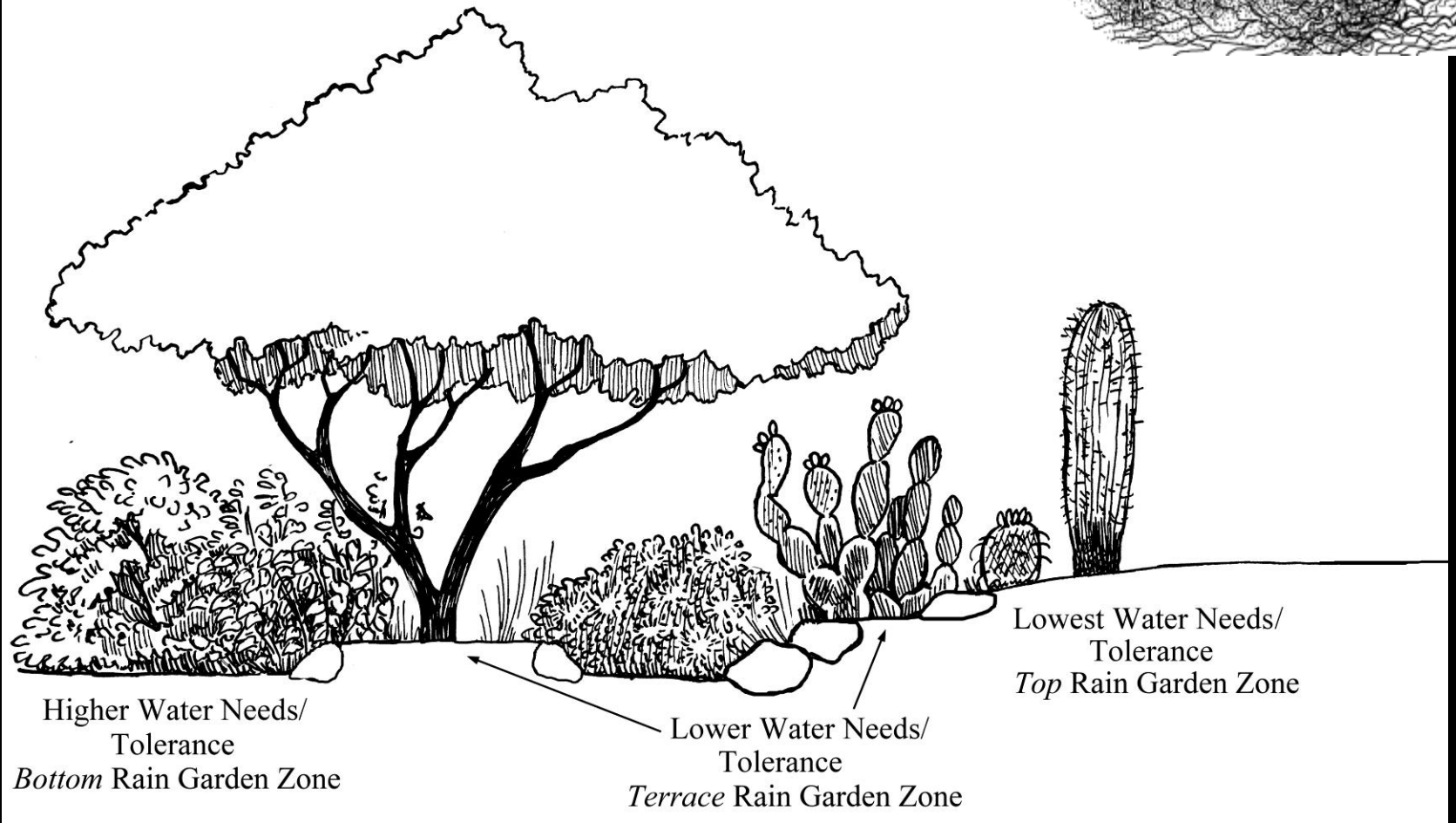
Plant the Rain

Rain Garden Zones

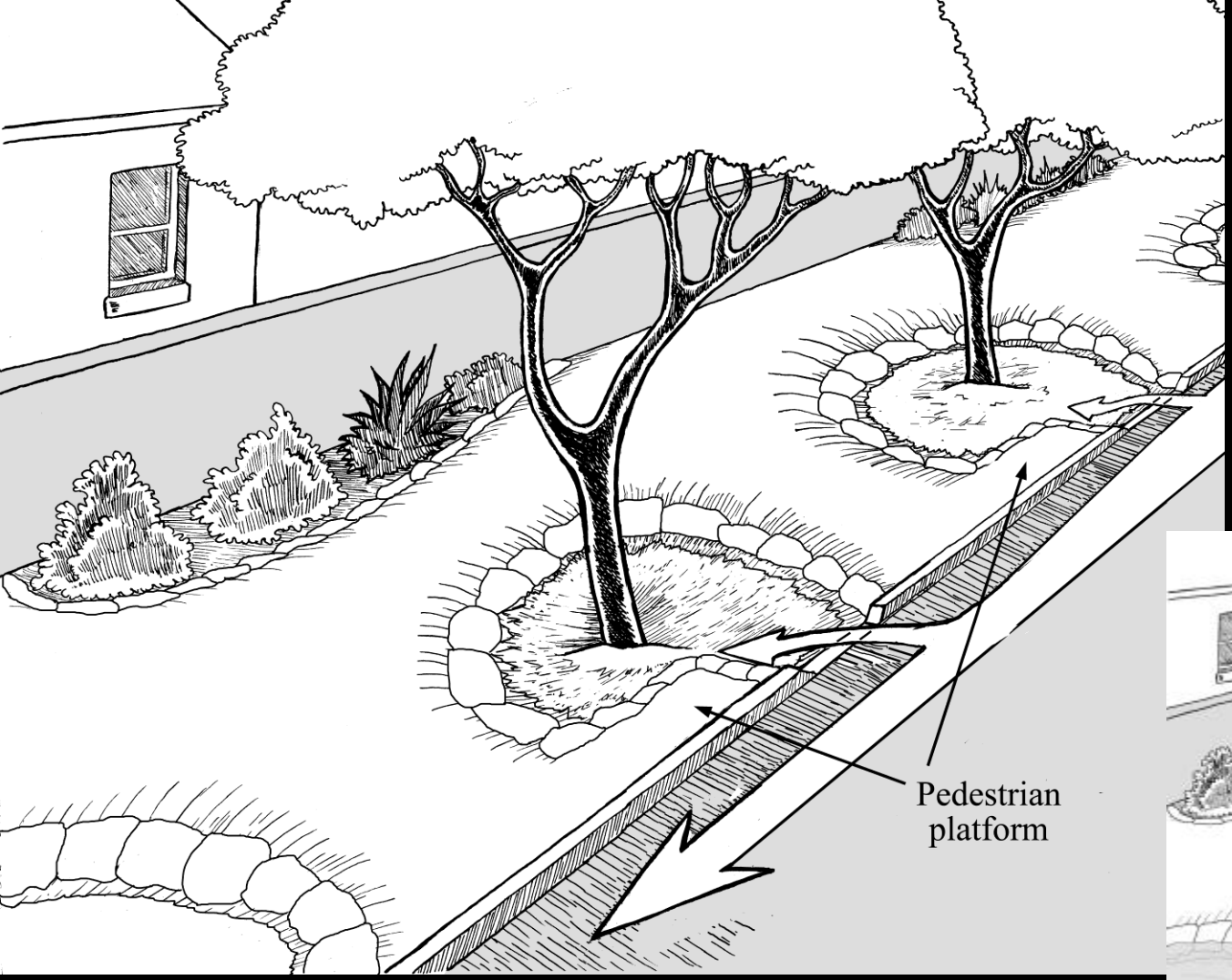
Bottom, Terrace, & Top

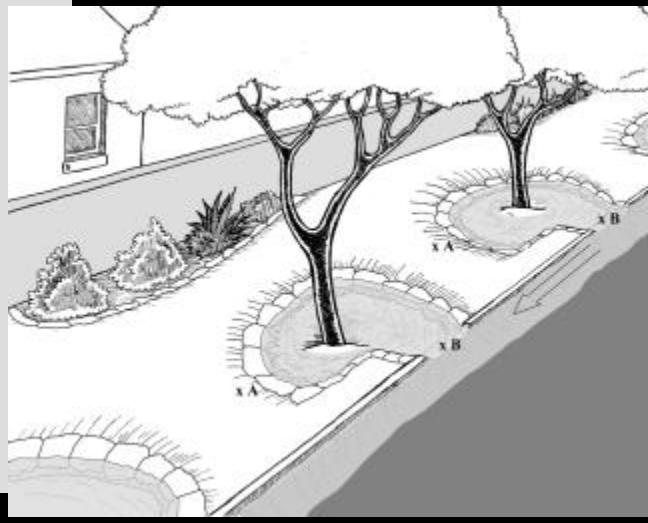
For Multi-Use Rain Garden Plants Lists see:

- *Rainwater Harvesting for Drylands and Beyond, Volume 1, 2nd Edition*, appendix 4
- Plant Lists & Resources at www.HarvestingRainwater.com



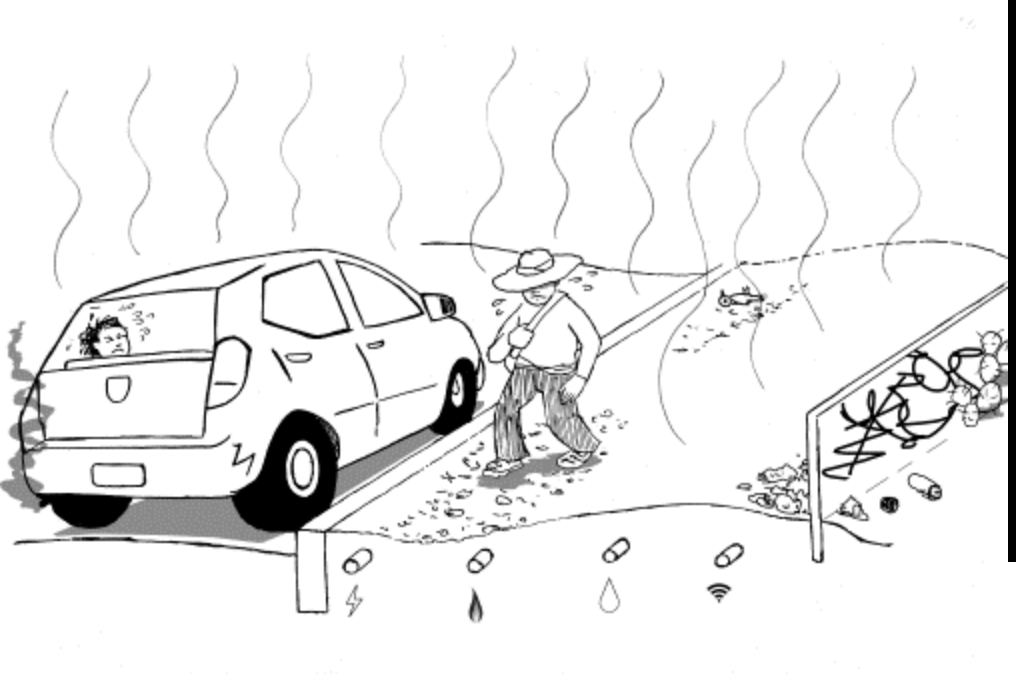
Plant Stormwater



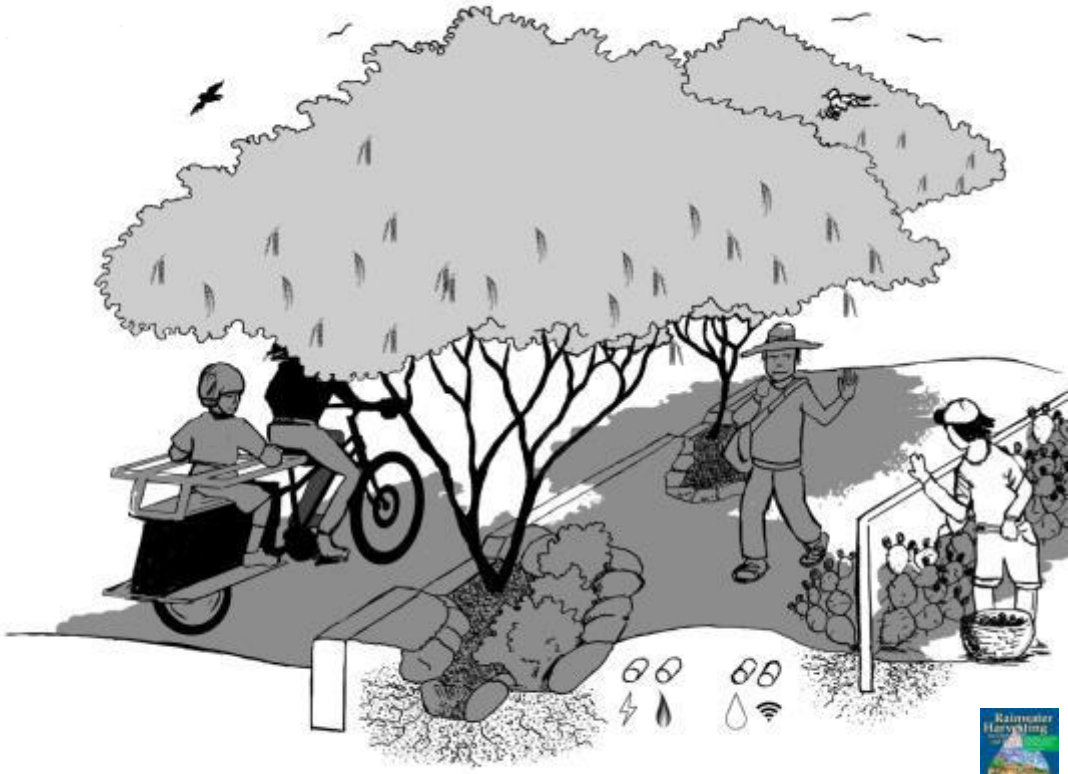


For every *inch* of rainfall…

- A 10-foot wide paved street will drain 27,800 gallons of rainfall per mile
- A 20-foot wide paved street will drain 55,700 gallons of rainfall per mile
- A 30-foot wide paved street will drain 83,500 gallons of rainfall per mile



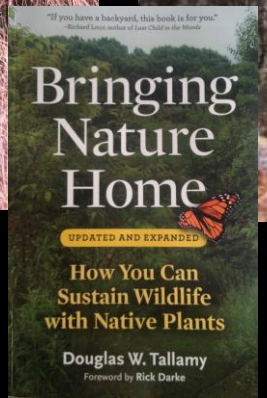
Keep Your Best Planting Spaces Plantable



Show the Flow

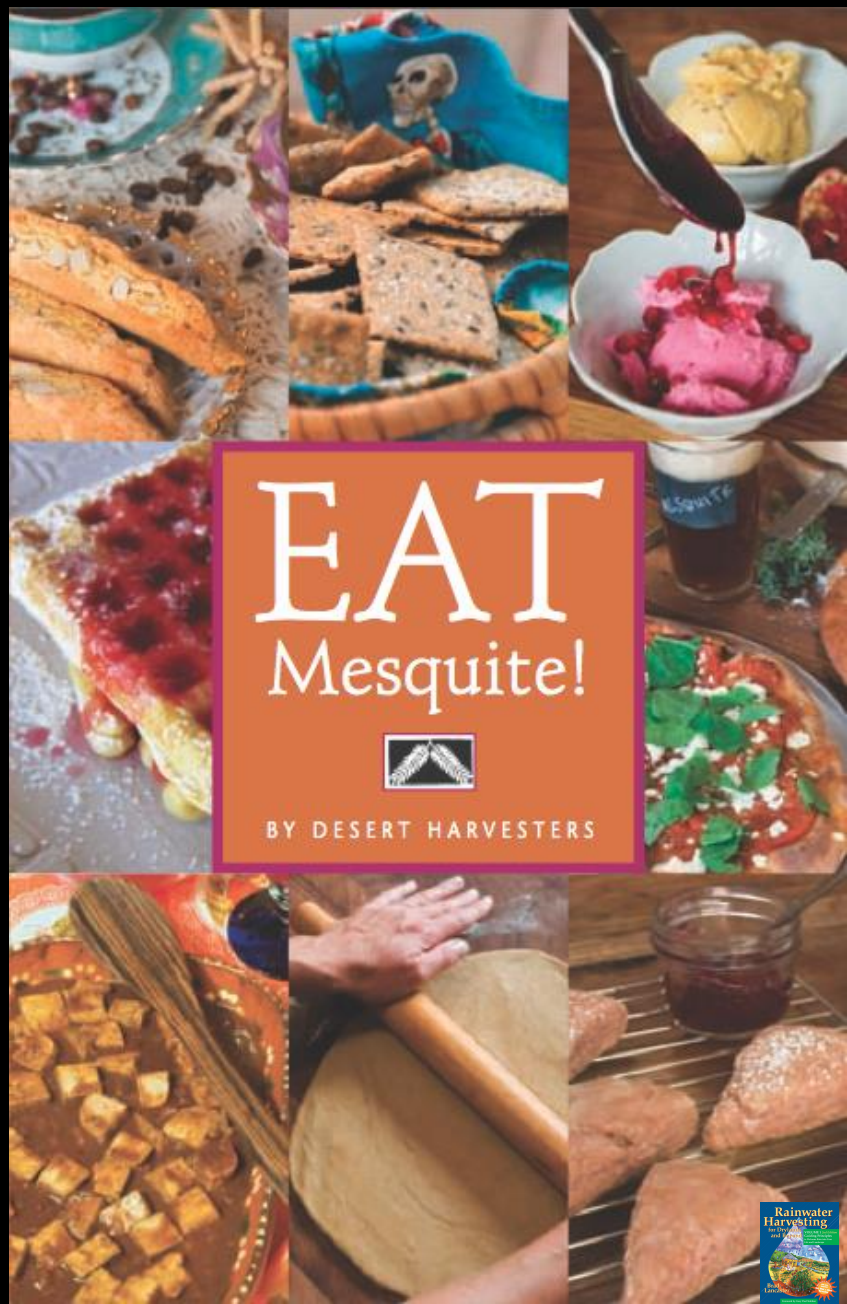
Maximize Habitat for Life

Non-native mirage



Native oasis

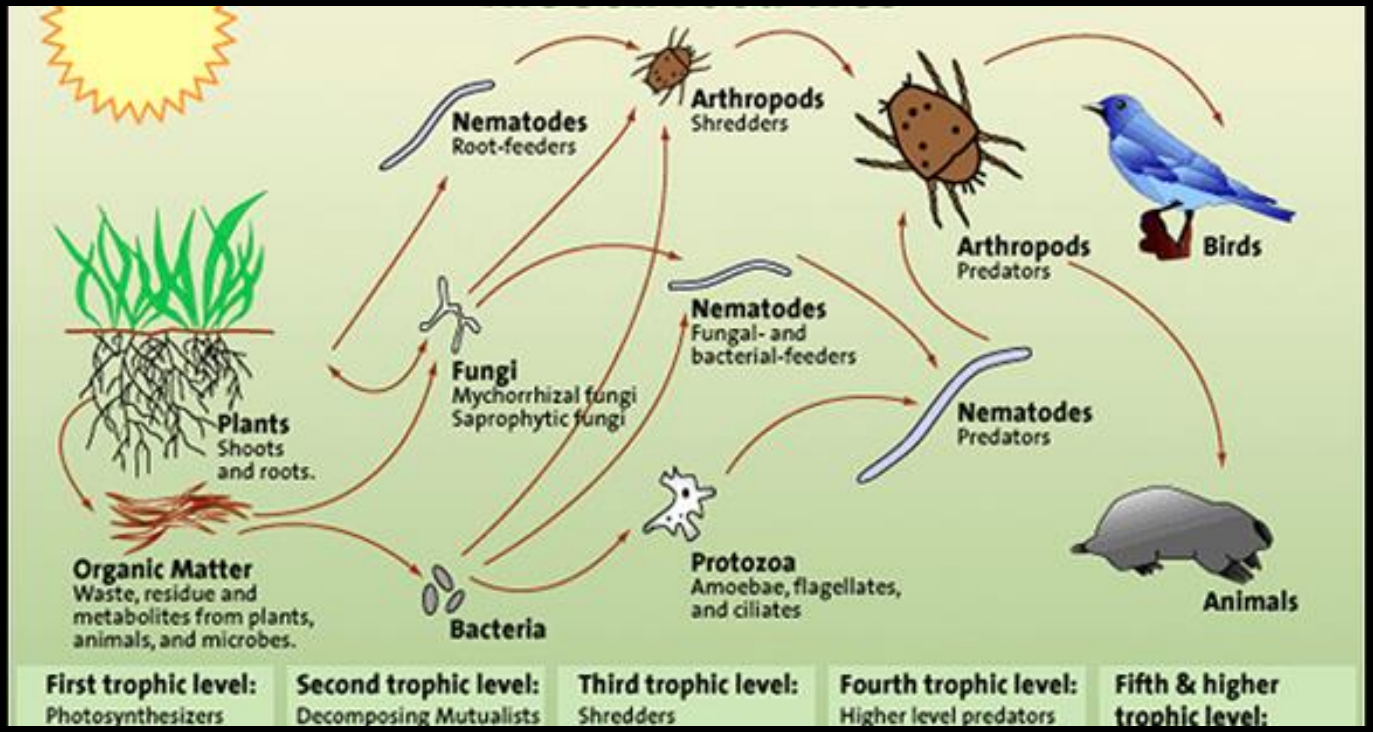
Celebrate and Demonstrate



Plant & Reinvest the Fertility

12 to 14% of the city's solid waste stream is prunings

Plant & Grow a Living Soil



Food-bearing native trees in street runoff-harvesting earthworks mulched with organic matter:

- Grow bigger & healthier trees
- Increase food production & carbon sequestration
- Have a natural pollutant-filtering/bioremediation ability that is ***ten times greater*** than that of rock- or gravel-mulched soil
- Do NOT uptake heavy metals into edible plant tissue.

Mitchell Pavao-Zuckerman, PhD, Biosphere 2 & School of Natural Resources and Environment, University of Arizona mzuckerman@arizona.edu

Grow Stewards

Chipped and Mulchy

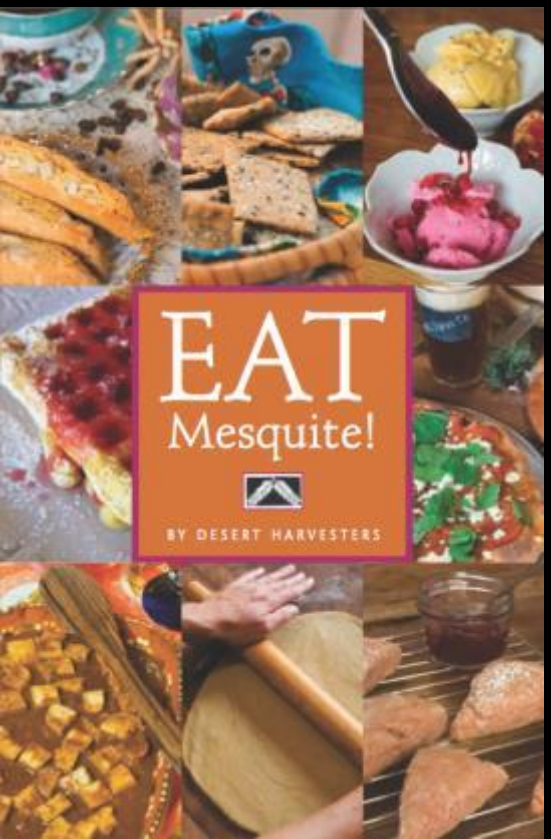
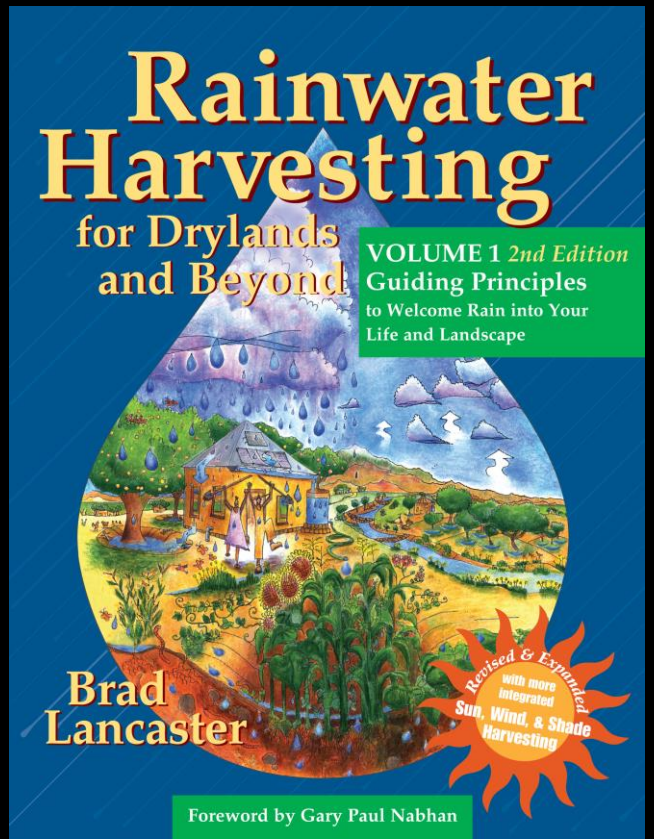
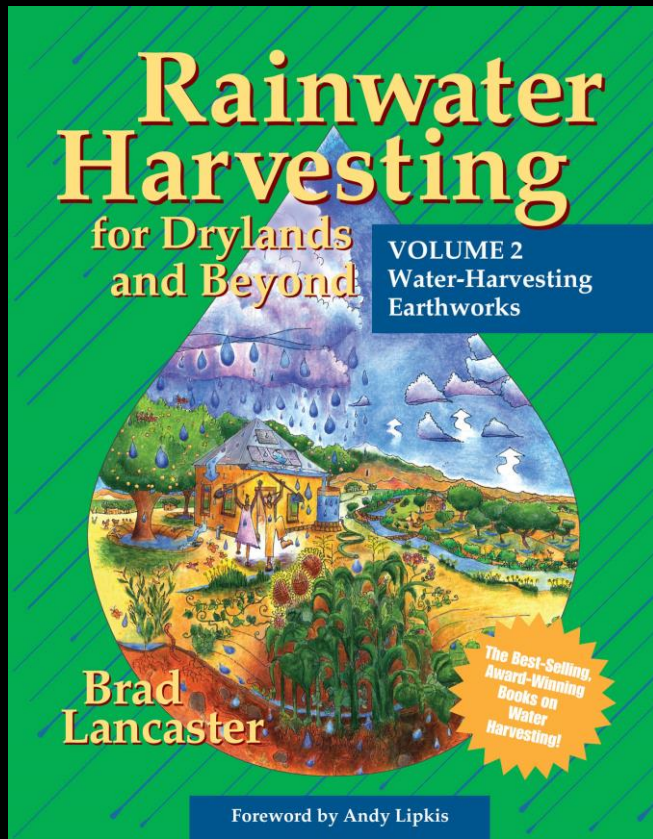
Grow What the Community Can Do by Working Together

Lost Sonoran Sucker fish and water-harvesting Horned Lizard sculpture
by Joseph Lupiani
in a water-harvesting
traffic-calming chicane

Where Do You Want to Live?

^ 1994

2006 >

DesertHarvesters.org

HarvestingRainwater.com