



wants YOU to grow a native tree (or shrub) from seed

Why grow a native tree (or shrub) from seed?

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Native plants:

- Are self-sufficient
- Can take the heat
- Support people
- Support biodiversity

Native trees feed insects







Insects feed other creatures

Why grow a native <u>tree</u> (or shrub) from seed?

ONE TREE



1,000 WILDFLOWERS



Trees are for humans too!





This is fruit

Albuquerque is getting hotter and dryer.

Our trees are already dying.

Our river is drying up.

We are taking its water to irrigate landscapes that are not adapted to our climate.



We can do better!





Guerilla-planted, irrigation-free median planted in 1998, thriving 25 years later.

Design and photo by <u>David Christiani.</u>

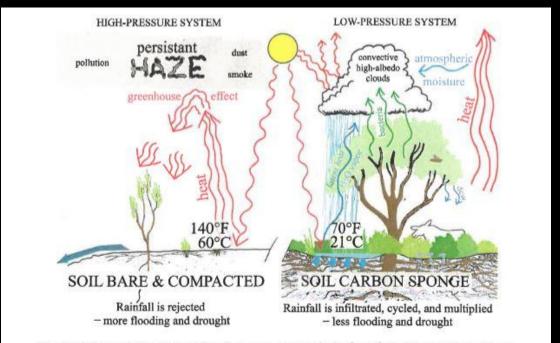


Fig. 1.8. The condition of the soil carbon sponge controls the fate of rainfall and affects climate. Adapted from "Recognizing the Soil Sponge" by Peter Donovan, SoilCarbonCoalition.org

RAINWATER HARVESTING FOR DRYLANDS AND BEYOND - VOLUME 2

Native trees help us adapt and fight climate change.

Why grow a native <u>tree</u> (or shrub) <u>from seed</u>?

Why grow a native tree from seed?

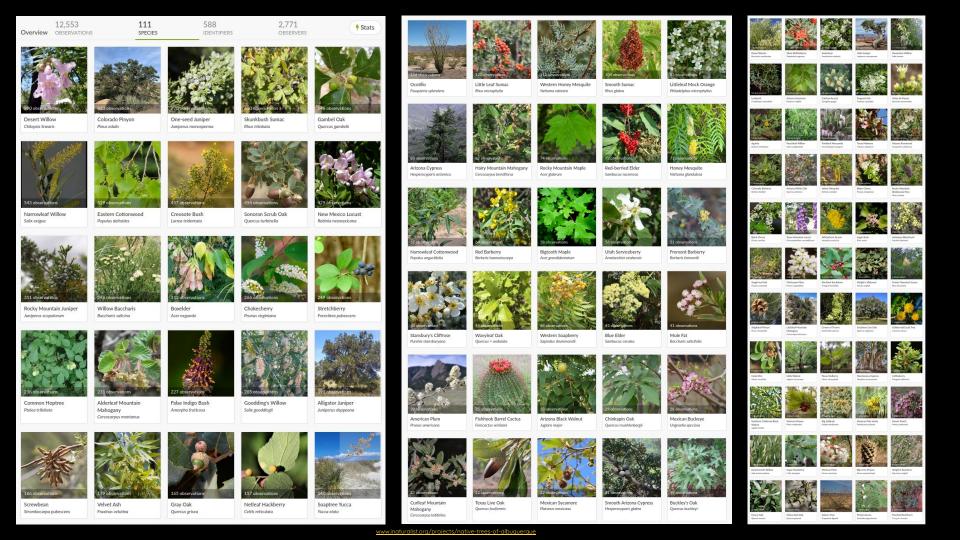
DIVERSITY!

- Biodiversity (many species)
- Genetic Diversity (variation within species)



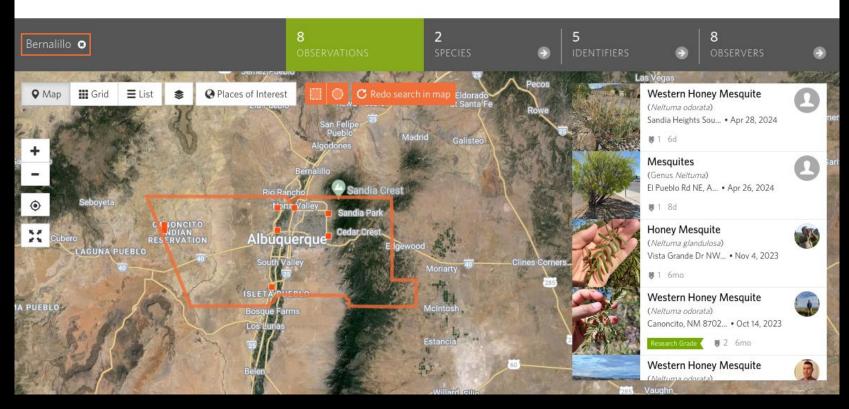
Why is diversity important?

- Increased pest resistance.
- Adaptation to a changing climate.
- **Local ecotypes**: the plants uniquely adapted to our climate, soils, and other beings.
- Your tree will be one-of-a-kind!



Observations













Western Soapberry

Sapindus drummondii











Western Honey Mesquite

Neltuma odorata







Velvet Mesquite

Neltuma velutina

How can I grow a native tree (or shrub) from seed?

No treatment:

- Desert Willow (Chilopsis linearis)
- Chamisa (Ericameria nauseosa)
- Apache Plume (Fallugia paradoxa)
- Mexican Buckeye (Ungnadia speciosa)
- Rio Grande Wolfberry (*Lycium torreyi*)
- Seepwillow (Baccharis salicina)
- Desert broom (Baccharis sarothroides)
- Native live oaks (Quercus sp.)
- Cottonwood (Populus deltoides)



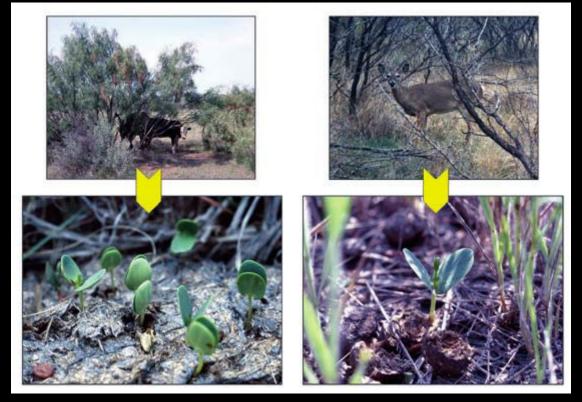
Photo by James Riggs on iNaturalist

Some seeds germinate only in specific conditions.

Stratification:

- Netleaf Hackberry (Celtis reticulata)
- Soapberry (Sapindus drummondii)
- New Mexico Olive (Forestiera pubescens)
- Sumacs (Rhus sp.)
- Piñon (Pinus edulis)
- Mountain Mahogany (Cercocarpus montanus)
- Cliffrose (Purshia stansburiana)
- Golden Currant (Ribes aureum)
- Pale Wolfberry (Lycium pallidum)
- Little Walnut (Juglans microcarpa)
- Chinkapin Oak (Quercus muehlenbergii)
- Alligator Juniper(Juniperus deppeana)
- ... and many more





<u>Drivers of Vegetation Change by R. James Ansley</u>

Some need to pass through an animal

Scarification:

- Mesquites (Neltuma sp.)
- Screwbean mesquite (Strombocarpa pubescens)
- Creosote (Larrea tridentata)
- Huizache (Vachellia sp.)
- Catclaw acacia (Senegalia sp.)
- Goldenball Leadtree (Leucaena retusa)
- Broom dalea (Psorothamnus scoparius)







Make sure seeds are removed from husk before scarifying!

Scarifiying

- Scratch edge of seed lightly against a rough surface.
- Create a small hole in the seed coat.



Today, we've done this for you!



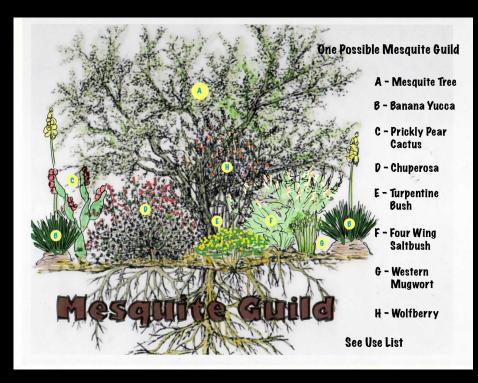


Ideal tree pots

(make sure to poke holes)

Mesquites support other plants

- Plant diversity increases around a mesquite!
- Nurse plant shade and shelter.
- Mesquites fix nitrogen (i.e. work with soil microbes to create their own fertilizer). Over time, soil fertility increases near a mesquite.
 - For best results, leave fallen leaves and pods as mulch!
- Deep roots avoid competition with shallow-rooted plants.





Scalding water also works!

Caring for seedlings

- Place in a warm, sunny, protected location.
- Small pots may need daily watering.
- One seedlings start growing adult leaves, put in afternoon shade outside.
- Gradually increase sun exposure.



Ready to plant outside!



Don't let this happen!

<u>Outplanting</u>

- Set a potted seedling in the site where you will plant it for a few days before planting.
- Loosen any circling roots, and allow the taproot to fully extend (you may need a deeper hole).
- Water the hole before and after planting. You can't give a newly planted tree too much water!

Most trees prefer fall, but mesquites love being planted outside in summer!



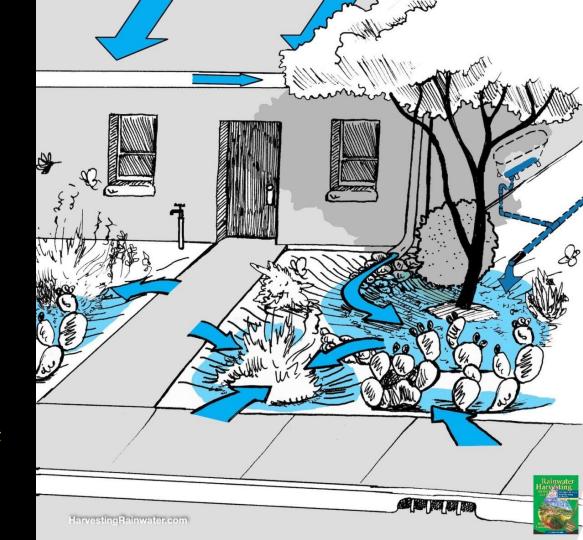
Let the rain water your tree!



Fig. 5.3. From left to right, a tree planted atop a mound from which water and soil drain away; within a circular berm which diverts area runoff and any leaf drop falling outside the berm away from the tree; and within an infiltration basin toward which the surrounding area is sloped so all direct rainfall, surrounding runoff, and leaf drop is harvested. These trees could've all been the same size at planting, and planted at the same time, though their current size reflects how the vegetation will respond to the degree to which different landforms drain or harvest resources.

sheltering shade tree. Dirt excavated to form the basin can further beef up or raise the road base so it stays high dry and accessible. And, the easy access to the this chapter for tips on tree species and spacing from buildings.) Greywater from household drains can also be directed to the basins to carry associated plantings

Build a wide, shallow basin to capture runoff from your roof or driveway







1 month





2 years





200 years

May your tree bring about a diverse, abundant landscape!



Don't forget to visit our table and plant your first tree!



We're in the Native Plant Garden with cups, soil, and ready-to-plant seeds!



What is Cool it Burque anyway?

We're just people who like to plant trees (and sometimes cactuses)





Our first planting: a tiny food forest at the Center for Peace and Justice



Building rainwater harvesting basins at the Pan-African Community Garden

the 3rd annual mesquite growing workshop



Join us in the first step to growing a desert food forest: planting the multi-talented mesquite tree.

Taste a mesquite treat, learn to make flour from pods, and take home your very own seedling!

We teach workshops!

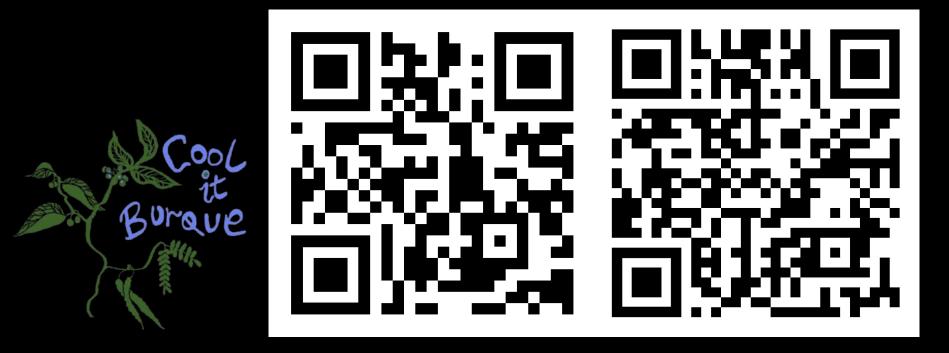
No cost

SATURDAY MAY 17 1-2:30PM

Center for Peace & Justice 202 Harvard Dr SE, ABQ

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"Unless someone like you cares a whole awful lot, nothing is going to get better. It's not."

- The Lorax