

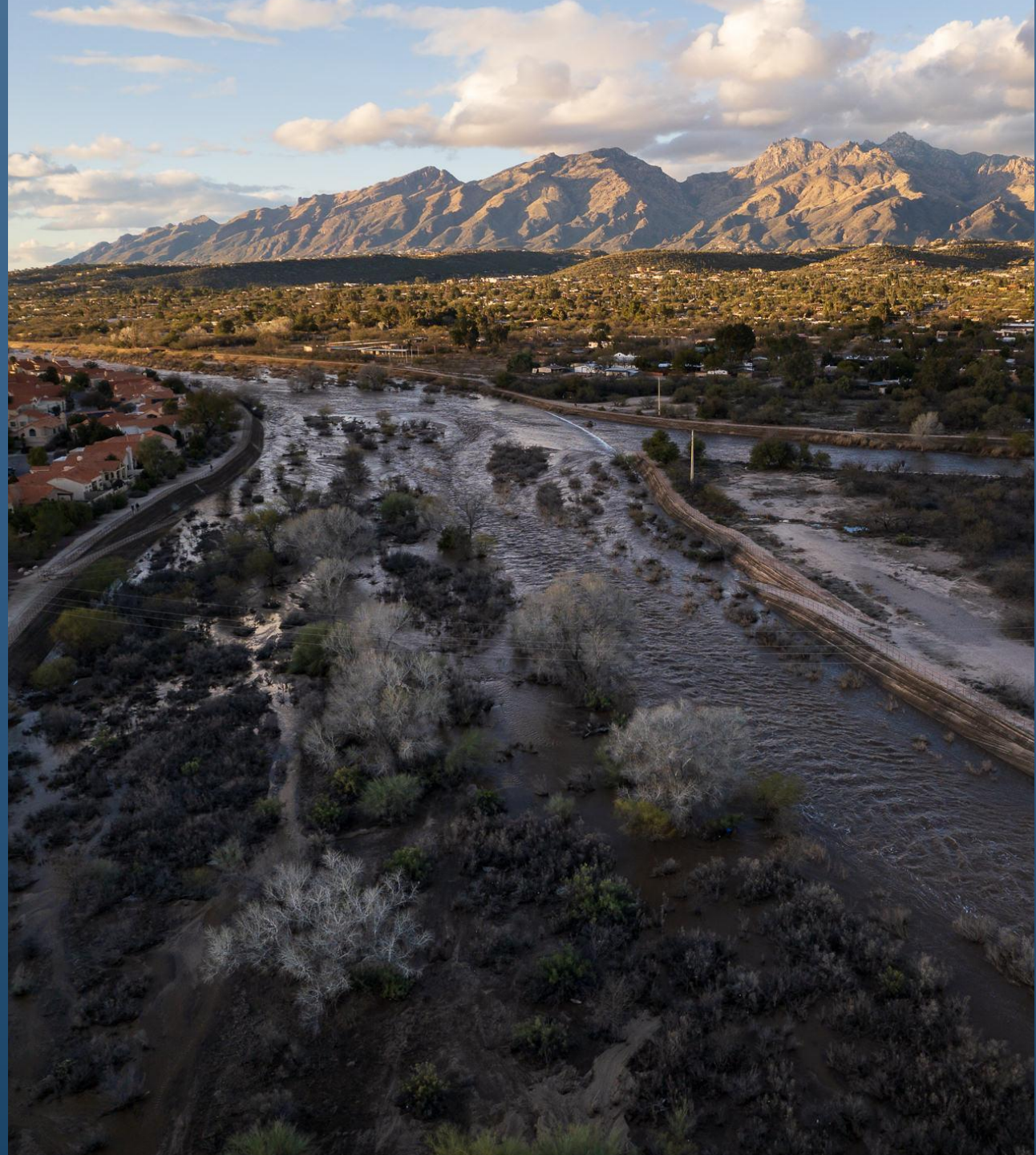


CULTIVATING NATIVE EDIBLE PLANTS



Presentation created by humans for humans

Watershed Management Group acknowledges that we live, learn, work, and engage with community on the ancestral lands of the Hohokam, Sobaipuri, and Apache people and those of the Pascua Yaqui and Tohono O'odham, whose relationship with this land continues to this day. We acknowledge that water in the Sonoran Desert is of great spiritual, physical, and ecological significance to be protected, cherished, and celebrated.



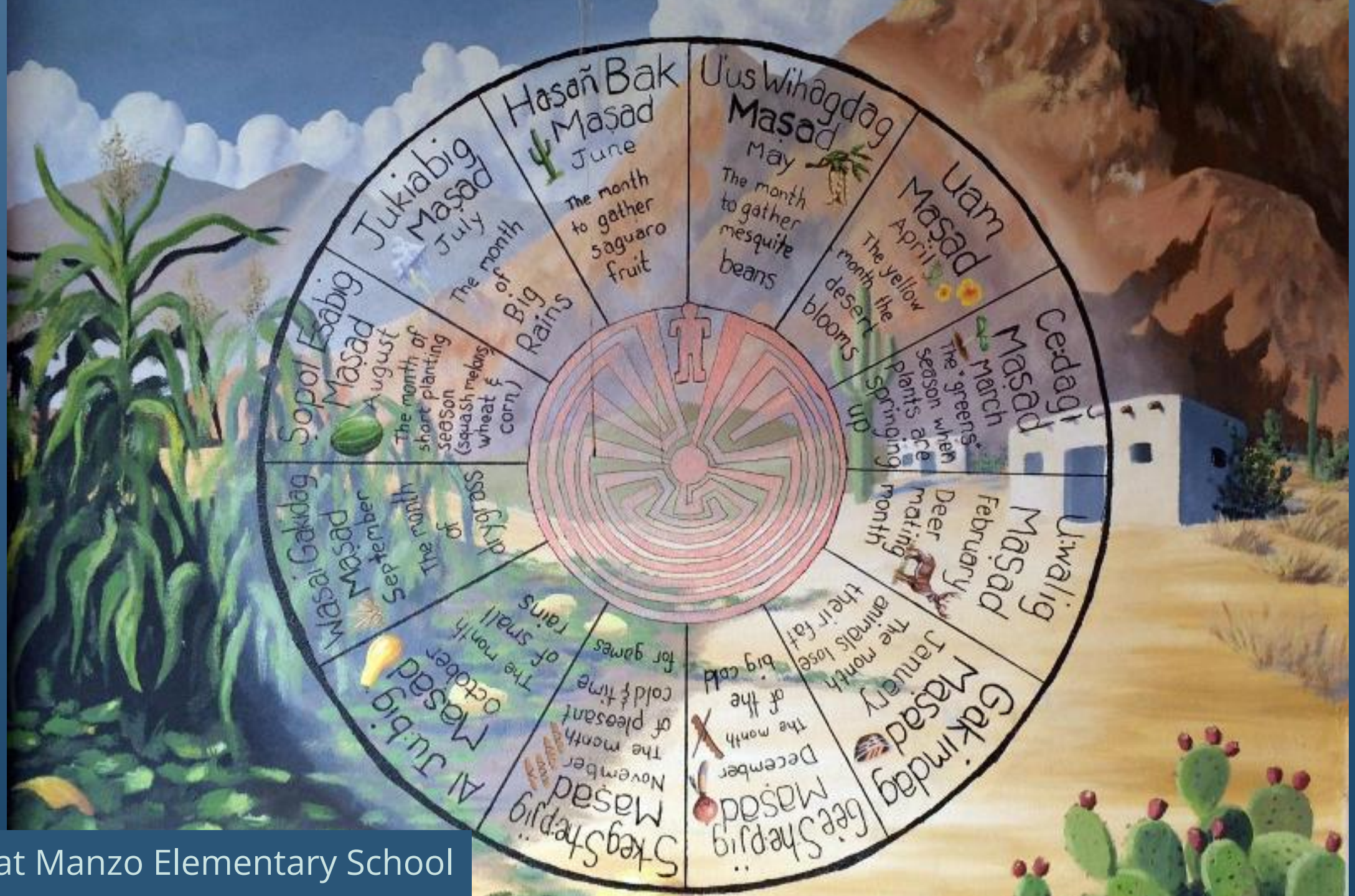


Over 4000 years of
cultivation

Over 10,000 years
of human
habitation







Mural at Manzo Elementary School



Traditional Techniques

- Sunken garden beds
- Trellises and shade structures
- Planting three sisters
 - Corn – provides tall stalks for beans to climb up
 - Beans are a legume, known for fixing nitrogen in soil
 - Squash spreads along the ground providing shade to soil
 - Additional sister plants are tobacco, amaranth, and sunflowers

*It will be the plants
that we use in our
gardens that
determine what
nature will be like 10,
20, and 50 years from
now.*

~ Doug Tallamy



homegrownnationalpark.org





~ 2500 native plant
species

~ 500 edible plant
species

Why cultivate
native edibles?





Traditional Cultivated Plants



Cultivated Plants

Tepary Beans

- Heat, drought and salt-tolerant, thriving in alkaline desert soil
- Planted during monsoon rains and harvested in October when pods are brown and crispy

Cultivated Plants

Tohono O'odham Ha:l Squash

- Heat, drought and salt-tolerant, thriving in alkaline desert soil
- Planted during monsoon rains and harvested in October when pods are brown and crispy





Cultivated Plants

Maricopa Sweet Corn

- Categories of corn are based on their level of starch
- Sweet corn needs warm temperatures, moderate water and soil nutrients
- The colors in the kernels develop after the corn is sweetest to taste

Cultivated Plants

Chiltepin

- Grow best in filtered light
- Harvested in the fall, perennial plant
- It's spicy!



A close-up photograph of a large pile of green and pinkish-red prickly pears (cholla) with a pair of metal shears resting on top. The fruit is covered in small, dark, round spines. The background is a solid dark blue color.

Wild Native Trees & Shrubs



Foothills Palo Verde

Parkinsonia microphylla

- Grows in foothills
- Edible flowers, seed pods, sprouts
- Spring & summer harvest
- Slower grower & bushier than its cousin the blue palo verde

Desert Ironwood

Olneya tesota

- Foothills
- Edible flowers & seed pods
- Spring, Summer harvest
- Slow growing tree, but will grow faster with stormwater, basins, etc.
- Fantastic pollinator plant
- VERY thorny – plant away from paths or block until grown





Velvet Mesquite

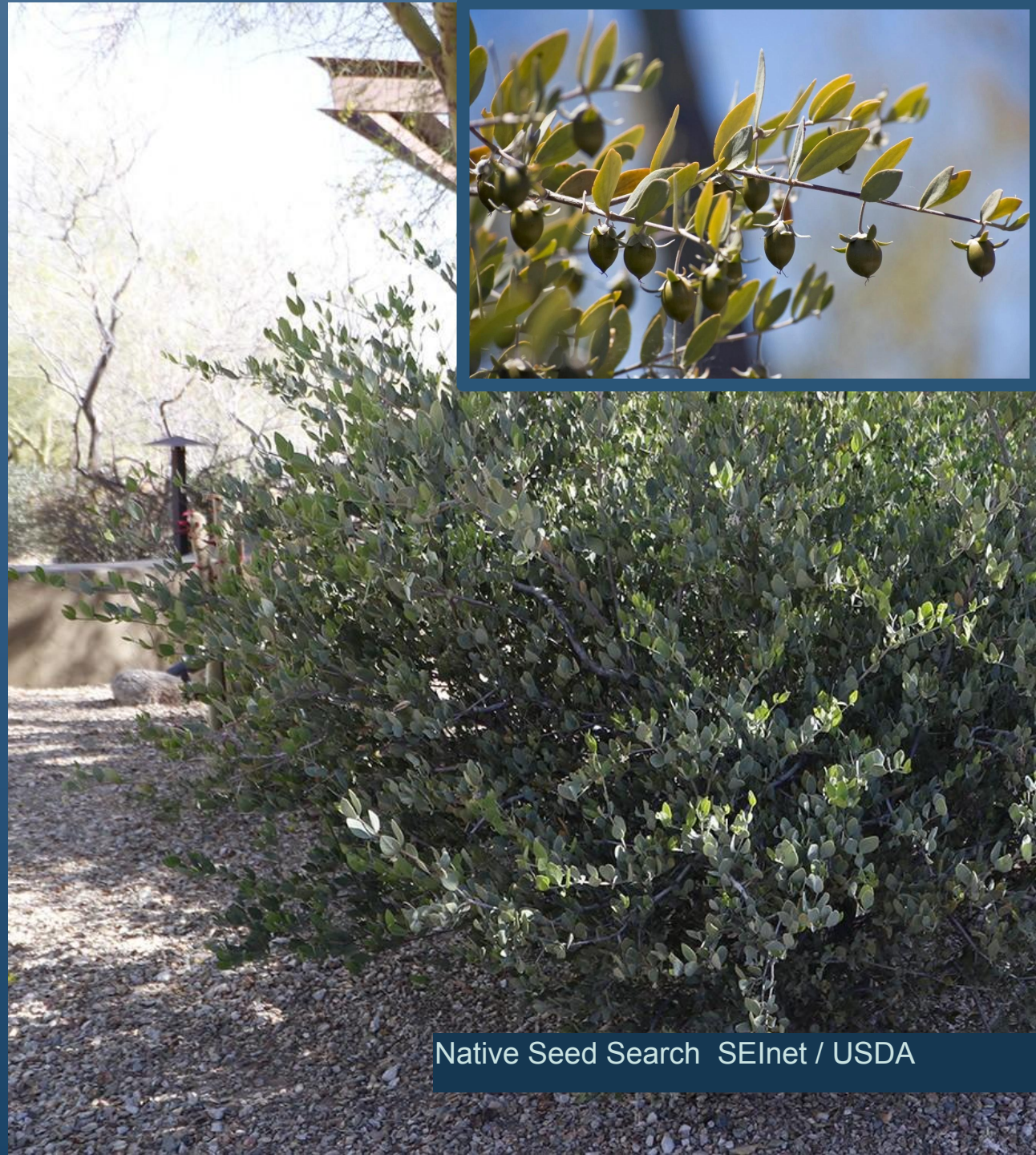
Prosopis velutina

- Uplands, riparian, lowlands
- Edible flowers & beans (milled)
- Fall / Summer harvest
- Fully ripened dried pods during dry periods before rain, dampened ripe pods can harbor fungus that produces aflatoxins

Jojoba

Simmondsia chinensis

- Riparian, upland, lowland
- Edible fruits (aka nuts) better roasted
- Spring, early summer harvest
- Nuts can be pressed for oil
- Female & male plants both necessary for a crop





Desert Lavender *Hyptis emoryi*

- Riparian, upland, lowland
- Edible leaves and flowers
- Spring, summer harvest

Wolfberry

Lycium sp.

- Riparian, upland, lowland
- Edible flowers, berries
- Spring, Summer harvest
- Excellent bird habitat
- Thorny, bushy, and big



Hackberry (Canyon & Desert)

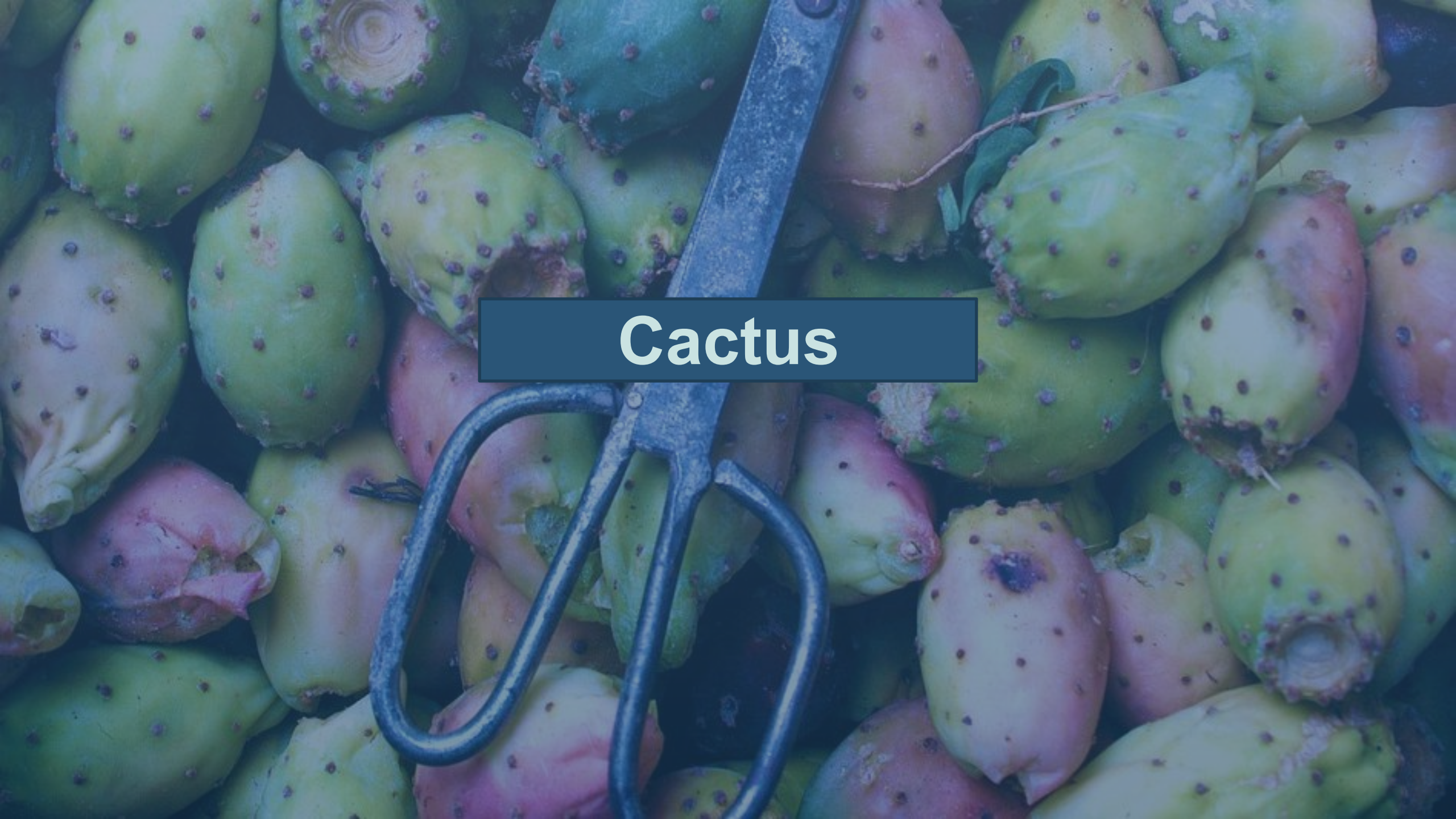
Celtis sp.

- Riparian, upland, lowland
- Edible berries
- Summer harvest
- Excellent bird habitat & food plant
- Canyon is more tree-shaped with sweeter fruit
- Desert is bushy, big, vigorous, and thorny – grow away from paths



seedoftheweek.com

tucsonaudubon.blogspot.com



Cactus



Staghorn Cholla *Cylindropuntia versicolor*

- Lowland
- Edible flower buds, fruit, sap
- Spring harvest
- Harvest buds when the first flower blooms on the plant
- Brush off thorns while bud is still on the plant, harvest with tongs

Desert Prickly Pear

Opuntia phaeacantha

- Lowland
- Edible pads (new growth), fruit, & flowers
- Spring harvest (pads) and summer/fall harvest (fruit)
- Watch for big spines and for the fine glochid hair-like spines





Barrel Cactus

Ferocactus wislizenii

- Lowland
- Edible flower fruit
- Year-round harvest
- “Larder” plant

Saguaro

Opuntia phaeacantha

- Protected – harvest off your own land or with landowner permission
- Lowland
- Edible fruit
- Summer harvest (fruit)





Banana Yucca *Yucca Baccata*

Does well in the arid desert as well as in higher elevation grasslands.

-Used widely by the Navajo and Apache people.

Flowers are edible and go great w/ eggs!

Will produce a banana like fruit but not every season.



Greens



Devil's Claw – Native Green *Proboscidea parviflora*

- Lowland, riparian, disturbed areas
- Edible immature fruit
- Post rain, mid-summer harvest

Careless weed – Native Green
Amaranthus palmeri

- Lowland, riparian, disturbed areas
- Edible seeds, young leaves
- Winter and spring harvest
- Be sure to harvest where you know pesticides have not been sprayed and away from roadways





Arizona Grape – Native Green

Vitis arizonica

- Lowland, riparian, disturbed areas
- Edible flowers, seeds, young leaves
- Winter and spring harvest

Purslane - Naturalized Invasive/ Native
Portulaca sp.

- Lowland, riparian, disturbed areas
- Edible leaves, stalks
- Winter and spring harvest
- Wild is commonly the less tasty version





Sprouts

- Palo Verde
- Mesquite
- Ironwood
- Pick when dicot leaves open or sprout from gathered beans
- Watch out for pesticides

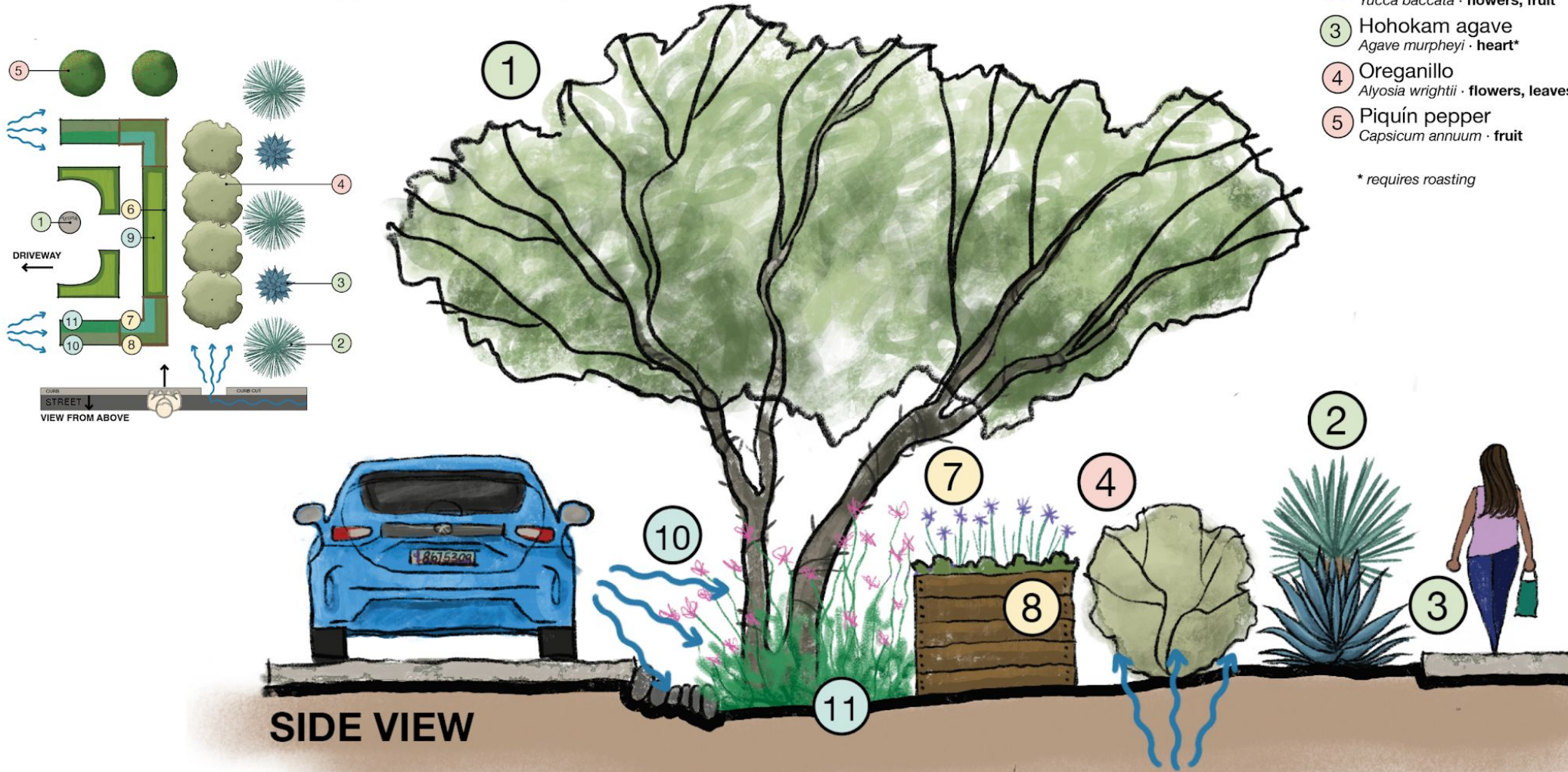


What's Coming Up

- Prickly pear pads & fruit
- Cholla fruit
- Barrel cactus fruit
- Mesquite beans
- Ocotillo flowers
- Oreganillo
- Devil's Claw
- Tepary Beans

Southwestern Savory Basin

A living pantry of veggies and herbs, just outside the kitchen door.



Plant placement reflects general moisture preferences, with thirstier species located lower in the basin and drought-tolerant species placed along the higher basin edges.

Illustrated at mature size. Plant placement, basin dimensions, and species should be adapted to site conditions.

Small but Mighty Micro-Basin

The young pads and ripe fruit of prickly pear, cholla buds, and leafy purslane are especially nutrient dense!

● Desert prickly pear
Opuntia engelmannii

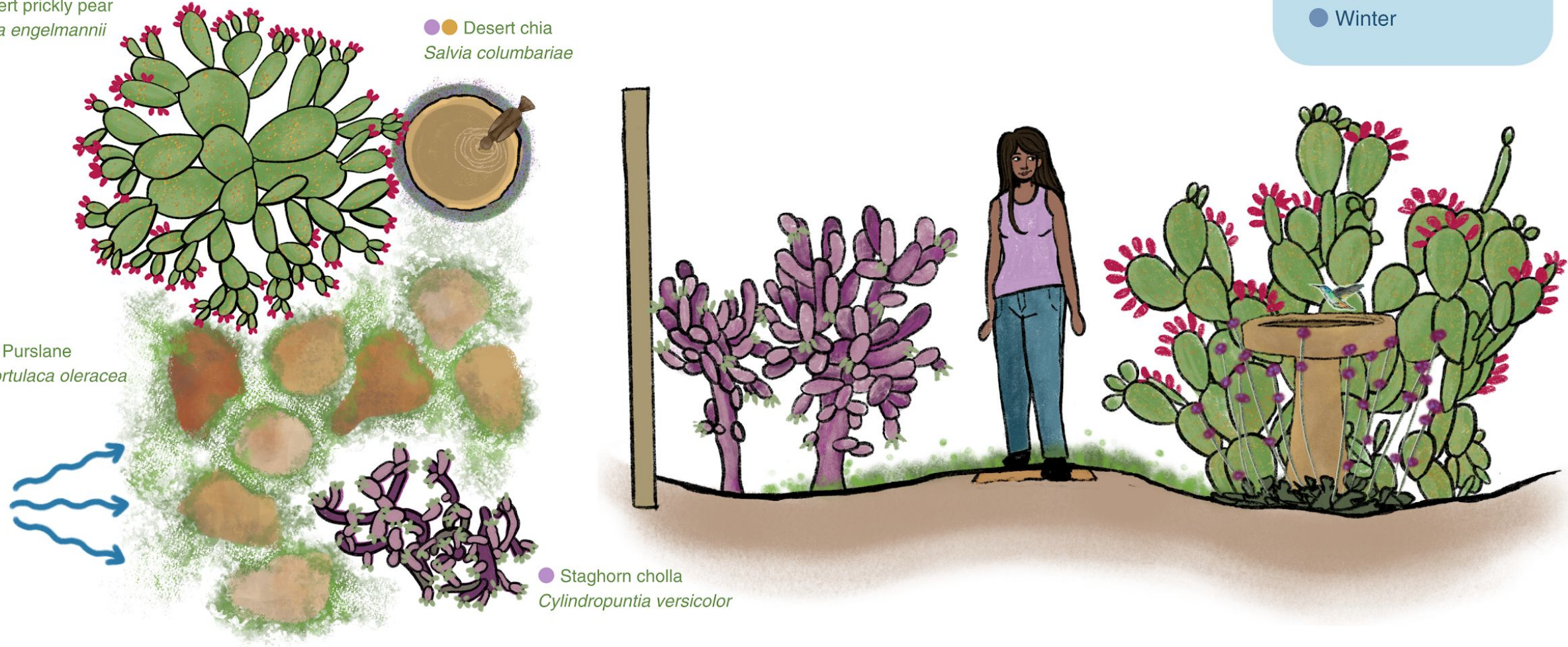
● Desert chia
Salvia columbariae

● Purslane
Portulaca oleracea

● Staghorn cholla
Cylindropuntia versicolor

HARVEST SEASON

- Spring
- Summer
- Fall
- Winter



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Illustrated at mature size. Plant placement, basin dimensions, and species should be adapted to site conditions.

Sweet Tooth Basin

Grow naturally sweet Sonoran native foods using harvested rainwater.

● Saguaro
Carnegiea gigantea

● Screwbean mesquite
Neltuma pubescens

●● Blue elderberry
Sambucus nigra subsp. cerulea

●● Pancake pricklypear
Opuntia chlorotica

●●● Fremont wolfberry
Lycium fremontii

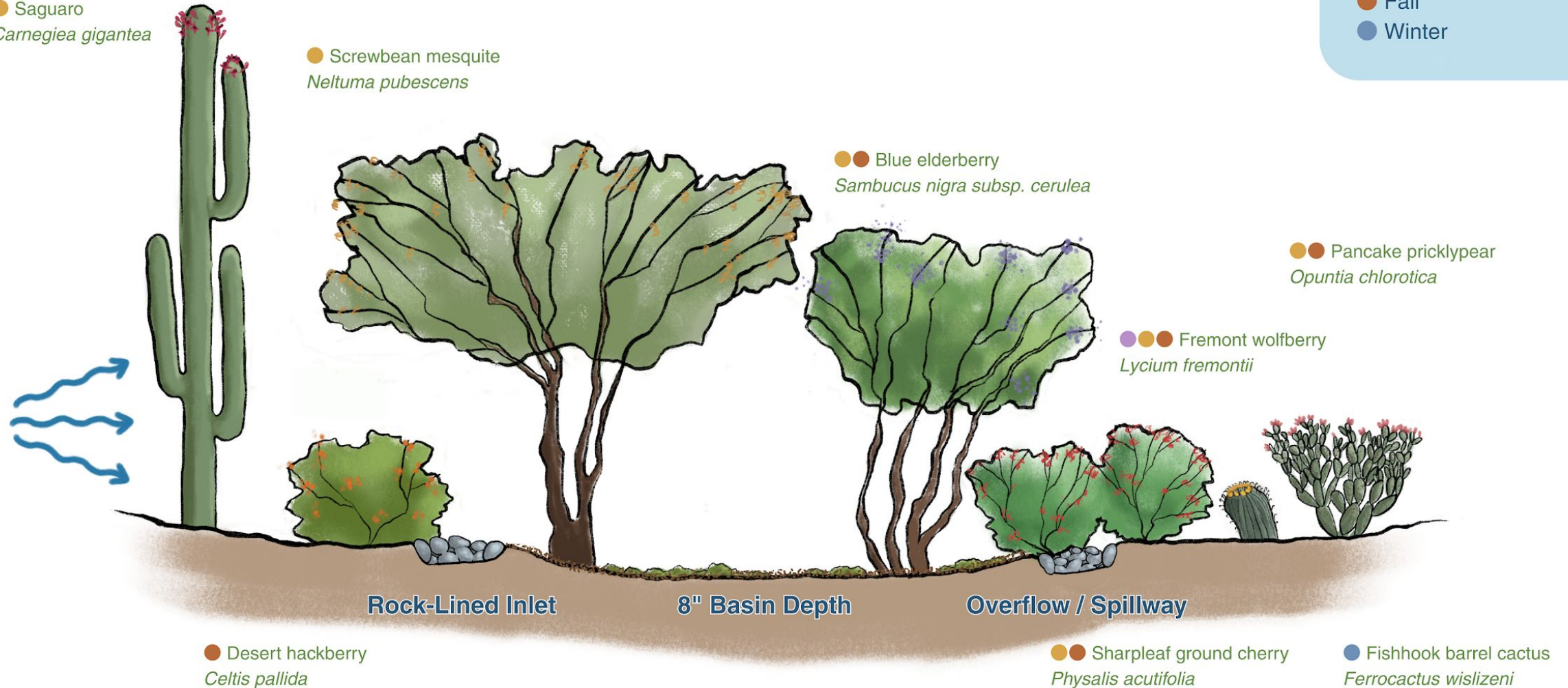
● Desert hackberry
Celtis pallida

●● Sharpleaf ground cherry
Physalis acutifolia

● Fishhook barrel cactus
Ferrocactus wislizeni

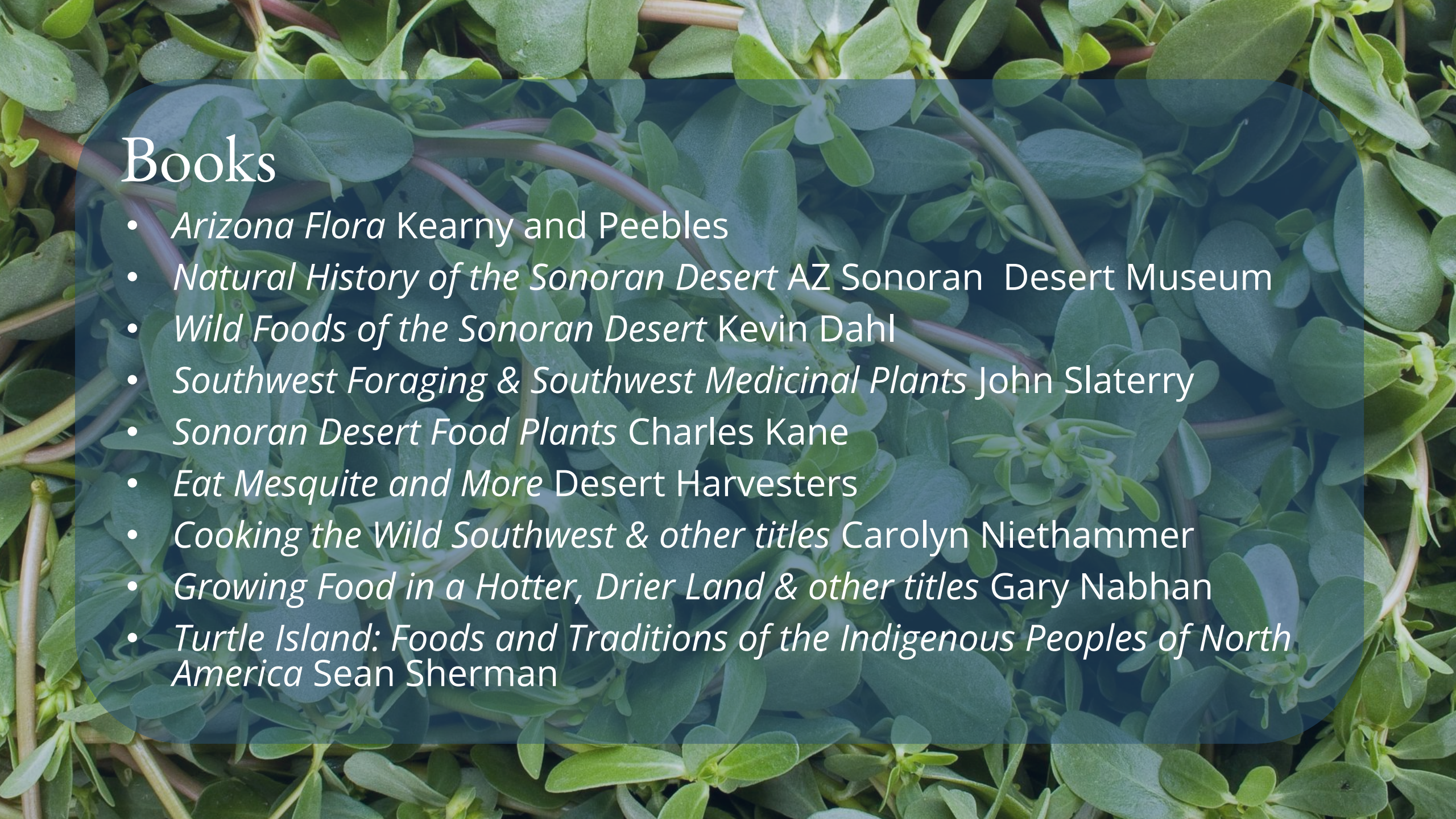
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Books

- *Arizona Flora* Kearny and Peebles
- *Natural History of the Sonoran Desert* AZ Sonoran Desert Museum
- *Wild Foods of the Sonoran Desert* Kevin Dahl
- *Southwest Foraging & Southwest Medicinal Plants* John Slaterry
- *Sonoran Desert Food Plants* Charles Kane
- *Eat Mesquite and More* Desert Harvesters
- *Cooking the Wild Southwest & other titles* Carolyn Niethammer
- *Growing Food in a Hotter, Drier Land & other titles* Gary Nabhan
- *Turtle Island: Foods and Traditions of the Indigenous Peoples of North America* Sean Sherman



Resources

- Seeds, Plants, Info: Mission Garden missiongarden.org
- Info: Southwest Environmental Information Network swbiodiversity.org/seinet
- Info: Dunbar Spring Neighborhood Foresters: tucsonnativeplants.com
- Seeds, Info: Native Seed/SEARCH nativeseedsearch.org

Resources

- Recipes, Info: Desert Harvesters desertharvesters.org
- Recipes, Info: savorthesouthwest.blog
- Info, Design: strategichabitats.com, IG [earthcare_landscapes](https://www.instagram.com/earthcare_landscapes)
- Nurseries: Spadefoot Nursery, Rozet Nursery, Sonora Flora Nursery



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watershedmg.org/give