

Arizona Trail Guide to Select Plants





Creosote
Larrea tridentata

Also known as:
Greasewood
Covillia

Classification:
Evergreen shrub

Size:
3 – 6 ft tall

Flowering time and color:
Flowers after rain. Always has small dark green resinous leaves.

Desert Adaptations:
Can live up to two years without rain, dropping its leaves and branches if necessary. An important nurse plant.

Found In:
Three of the four American deserts

Food Source for:
Jackrabbits and many insects

- Additional Information:**
- Was the single most important medicinal plant to Native Americans. Is still sold as a remedy in the form of chaparral tea.
 - Currently being researched as an anti-cancer agent.
 - The aromatic resin on the leaves is what creates the smell after it rains in the desert.
 - Can live several thousand years.



Ocotillo
Fouquieria splendens

Also known as:
Coachwhip

Classification:
Woody shrub

Size:
10 – 20 ft tall.

Desert Adaptations:
Drop their leaves in times of drought, but can re-grow them within 48 hours once receiving enough water.

Found In:
Sonoran Desert

Food Source for:
Hummingbirds, vireos, carpenter bees, Antelope squirrels

- Additional Information:**
- Stalks have been used for buildings and roofs.
 - Flowers can be soaked to make tea.
 - Can photosynthesize without any leaves. There is a thin layer containing chloroplasts within their bark.



Thousands of yellow blossoms cloth the plants,

Yellow Palo Verde *Cercidium microphyllum*

Also known as:
Foothills Palo Verde
Little leaf Palo Verde
Palo Brea

Classification:
Deciduous Tree

Size:
15 ft tall

Desert Adaptations:
Palo Verdes can drop their leaves in times of drought. Their green bark also contains chlorophyll allowing these trees to continue photosynthesizing after losing their leaves.

Found In:
Sonoran Desert

Food Source for:
Rodents, javelina, seed eaters, bees

Additional Information:

- Major food crop for the O'odham and Seri people.
- Do not make growth rings in trunk.
- May live to up to 400 years.



Saguaro Cactus *Cereus giganteus*

Also known as:
Giant cactus

Classification:
Columnar cactus (succulent)

Size:
Average 40 ft tall; can reach 78 ft

Desert Adaptations:
Made up of deep accordion folds allowing rapid expansion and contraction with water gain or loss. When fully hydrated it is about 90% water. Uses nurse plants when first growing.

Found In:
Sonoran Desert to about 4000 ft.

Food Source for:
Bats, bees, birds, small mammals

Additional Information:

- Vital to the Tohono O'odham culture. Fruit ripening would signal the end of the spring food shortage and some calendars were based on the seasonal cycles.
- Indicator species for the Sonoran Desert.



Prickly Pear Cactus
Genus Opuntia

Also known as:
Engelman prickly pear
Beavertail cactus

Classification:
Opuntoid cactus (succulent)

Size:
5 ft tall; 2 – 3 times as wide.
Individual pads may be up to 1 ft long

Desert Adaptations:
Pads are covered with spines of varying length to present a less appetizing meal. Spines also provide additional shade. Water proof skin helps keep water in.

Found In:
Southwestern states

Food Source for:
Rabbits, packrats, javelina, deer, squirrels, birds, tortoises, beetles

Additional Information:

- Both the cactus and the fruit is edible. Used in a variety of syrups, candies and jellies.
- Juice from the fruit was also used to reinforce mortar in adobe houses.
- A type of scale insect found on these cacti was an important and valuable dye to the Native Americans.



Soaptree Yucca
Yucca elata

Also known as:
Soapbush
Spanish bayonet

Classification:
Semi-succulent plant

Size:
Up to 23 ft tall

Desert Adaptations:
Has a mutualistic relationship with the Yucca Moth. The moth lays its eggs within the flower and the newly hatched larvae eat the developing seeds. During this process the moth cross-pollinates the yucca.

Found In:
Central Arizona to western Texas and northern Mexico.

Food Source for:
Variety of wildlife and Yucca Moth

Additional Information:

- Younger leaves were used in basket making by the Tohono O'odham.
- Roots used to make soap.
- Both flowers and fruit are edible.
- Roots were used to make foaming agent in root beer.



Cholla

Also known as:

Species include jumping, staghorn, buckhorn, teddy bear, Christmas and pencil

Classification:

Opuntoid cactus (succulent)

Size:

3 – 10 ft tall

Desert Adaptations:

Heavily spined to avoid being eaten. Spines also contain strong barbs which allow them to latch easily onto passing creatures and are transported long distances. Drought tolerant.

Found In:

Sonoran and Mohave Desert

Food Source for:

Small mammals and insects

Additional Information:

- O’odham and their predecessors would eat cholla flower buds which were an important source of protein, calcium and fiber. The buds were first rolled on the ground with a stick to remove the spines and then roasted in a fire pit. These were generally harvested in spring before the Saguaro fruit were ripe.

Also known as:

Century plant
Mescal

Classification:

succulent

Size:

1.5 – 3 ft tall

Desert Adaptations:

Thick, waxy leaves to prevent water loss. Also has adapted lifecycle in which it only flowers once in its life. The agave will store carbohydrates and sugars for years and then send up a massive stalk of blooms. After flowering the plant will decline and die. Most agaves also reproduce via underground suckers.

Found In:

Western North America

Food Source for:

Bats, moths, hummingbirds; plant tissue of most species is unable to be eaten raw

Additional Information:

- When roasted, some species were an important food source to Native Americans. The “heads” of the agave would be cut off and roasted together in large pits.



Agave



Mesquite

Also known as:

Species include Honey and Velvet

Classification:

Tree

Size:

10 – 30 ft tall

Desert Adaptations:

Have one of the deepest root systems found. Some have been documented at up to 160 feet below the ground. Even though their roots go this far below the ground, about 90% of their roots can be found within the first 3 feet.

Found In:

Arizona and California

Food Source for:

Many small mammals, birds, beetles

Additional Information:

- Pods from the trees have been a major food source for many indigenous peoples. The pods can be composed of up to 30% sugar and 35% protein and can be ground into flour for bread.
- Inner bark was also used for basket weaving, dyes, potter repair, and its sap can be used to make gumdrops.



Jojoba

Simmondsia chinensis

Also known as:

Goat nut, deer nug, wild hazel, quinine nut, coffeeberry, gray box bush

Classification:

Evergreen shrub

Size:

2 – 5 feet tall

Desert Adaptations:

Plant will shed its leaves in times of severe drought. At other times leaf orientation (upright) protects it from direct midday sun, which only strikes the edges of the leaves. When the cooler morning and later afternoon sun are shining at an angle, the light strikes the wider flat surface allowing more photosynthesis.

Found In:

Sonoran Desert

Food Source for:

Javelinas, deer, bighorn sheep, livestock, small rodents, birds

Additional Information:

- Was only eaten as a last resort by indigenous people.
- Jojoba has been said to have saved the Sperm Whale. 40% of the jojoba's leaf is composed of liquid wax. This is very resistant to breaking down at high temperatures, which makes it a very important industrial lubricant. Before the discovery of jojoba oil, only sperm whale oil had these properties.



Ironwood

Also known as:
Desert Ironwood

Classification:
Deciduous tree

Size:
Up to 35 ft tall

Desert Adaptations:
Has a very deep taproot to access deeper water and nutrients.

Found In:
Sonoran Desert

Food Source for:
Native birds and rodents. Seeds are mildly toxic and should not be consumed in large amounts.

Additional Information:

- The Seri use this wood in their woodcarvings. Mass production of these carvings has caused larger trees to be over harvested. The Seri also used Ironwood seeds as a food source after cooking them in two changes of water.