

Prickly Pears



The **prickly pears**, also known as **paddle cactus**, comprise the genus **Opuntia** in the tribe **Opuntieae**. Such cacti are recognized by one distinctive characteristic: their stems present as flattened, circular to ovate **cladodes** (pads)--known commercially as nopales--that serve as water-storage structures. The pads host neat rows of **areoles** (definitive of all cacti), each giving rise to small, detachable, barbed **glochids** (bristles), plus long, fixed, smooth spines in most species. The large, showy, **perfect** (bisexual) flowers are brightly colored and bowl shaped, giving rise to **berry** fruit containing numerous **arillate** (fleshy coat) seeds. The fruit is fleshy and sweet (but dry in some species), and rich in vitamin C. Native to arid and semi-arid regions of the Americas (introduced worldwide), prickly pear cacti are common throughout the Mojave Desert, with at least 12 species represented.

Sub-Family **OPUNTIOIDEAE** (Prickly Pears)

Pancake Prickly Pear (*Opuntia chlorotica*)



Cerbat Mtns; Mohave Co.; AZ



Christmas Tree Pass; Spirit Mountain; NV



large flowers



Cerbat Mtns; Mohave Co.; AZ



Cerbat Mtns; Mohave Co.; AZ

- Flowers:** perianthic; bowl-shaped; solitary; bisexual, many stamen (yellow anthers); **yellow**, red center; 2"
- Stems:** flat pads; circular to oval; erect; central trunk; branched, stacked; smooth, succulent; **green**; 8"
- Leaves:** spines; needle-like; clustered; straight to slightly curved; **straw yellow**; 2"
- Blooms:** April to July
- Range:** southwestern US
- Habitat:** arid, rocky; grasslands, deserts; canyons, slopes, foothills, etc.; Lower Sonoran to Transition LZs

Notes:

common locally; shrubby to arborescent perennial; grows to 8' in rocky desert scrublands to montane foothills of the sw US from sw NM west to se CA south into Baja CA, MEX, at elevations of 2,000 to 8,000'; aka **Dollar-Joint Prickly Pear**, **Silver Dollar Cactus**, **Flapjack Prickly Pear**; **areoles** on pads (arranged in diagonal rows of 7-10 per row) host numerous .25" **glochids** (short, barbed spines) and 0-7 non-barbed spines; 2" rounded, spineless, fleshy, red **berry** fruit; pollinated primarily by bees; provides cover and nesting for birds, rodents, etc.; pads and fruit are edible

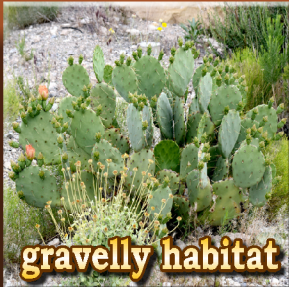
Mojave presence: native

Comments:

While pancakes are not nearly as plentiful as other prickly pears in the Mojave region, they are certainly distinctive and easily identified when encountered. Though not evenly widespread, they can be quite abundant locally, such as the specimens shown here from the Cerbat Mountains in Mohave County, AZ, in November of 2022.

Sub-Family **OPUNTIOIDEAE** (Prickly Pears)

Engelmann's Prickly Pear (*Opuntia engelmannii*)



gravelly habitat

Red Rock Cyn NCA; NV



April

Red Rock Canyon National Conservom Area; NV



showy flowers

Red Rock Cyn NCA; NV



pale spines

Red Rock Cyn NCA; NV



obovate pads

Red Rock Cyn NCA; NV

- Flowers:** perianthic; bowl-shaped; solitary; bisexual, many yellow stamen; **yellow, orange, red**; 2.5"
- Stems:** flat pads; circular to obovate; sprawling/erect; many; branched; smooth, succulent; **green**; 5-8"
- Leaves:** spines; needle-like, angular at base; straight to curved; white to **straw yellow**; 2"
- Blooms:** April to July
- Range:** south and southwestern US; Baja and northwestern Mexico
- Habitat:** arid, sandy to rocky; desert scrub, slopes, foothills, etc.; Lower Sonoran to Canadian Life Zones

Notes:

common; perennial; shrubby to arborescent; grows to 8' (usually less) in a variety of habitats (mainly arid to semi-arid) of the s/sw US from MS west to CA, south to nw MEX at elevations of 1,000 to 9,000'; aka **Cactus Apple**; 6 subspecies; 5-8 **areoles** per diagonal row, with widely spaced **glochids** and 0-12 (usually 2) spines; 3", purple-red, bristly, barrel-shaped **berry** fruit; pads (sauteed, candied, etc.) and fruit (raw, jellied, etc) are edible

Mojave presence: native

Comments:

Engalmann's and the **Tulip Prickly Pear** *Opuntia phaeacantha* are easily confused, as they are very similar in size and appearance, and both occur at the **Red Rock Canyon NCA** in southern Nevada. However, they can be distinguished by two predominant characterisites. Engalmann's is erect and shrubby in habit, and possess white to yellowish spines, whereas the tulip grows in a sprawling manner, and its spines are brown to black.

Sub-Family **OPUNTIOIDEAE** (Prickly Pears)

Tulip Prickly Pear (*Opuntia phaeacantha*)



sprawling habit

Red Rock Cyn NCA; NV



brownish spines

Red Rock Cyn NCA; NV



May

Red Rock Canyon National Conservatiom Area; NV



pointy tepals

Red Rock Cyn NCA; NV



circular pads

Red Rock Cyn NCA; NV

- Flowers:** perianthic; bowl-shaped; solitary; bisexual; greenish stigmas, filaments; **yellow**, orange base; 3"
- Stems:** flat pads; circular to obovate; sprawling, prostrate branching; smooth, succulent; **green**; 4 - 10"
- Leaves:** spines; needle-like; straight to slightly curved; **brown** to **black** (new) to whitish (old); to 3"
- Blooms:** April to July
- Range:** southwestern US; Mexico
- Habitat:** sandy to rocky; desert scrub to pinyon-juniper woodlands; Lower Sonoran to Transition Life

Notes:

common; perennial; grows to 3' tall, 9' wide, in sw US and MEX up to 7,500'; 2" green (young) to red-purple (mature), fleshy, spineless **berry** fruit; 5-7 **areoles** per diagonal row, each with 0-8 spines (usually flattened at base) and dense clusters of tan to red **glochids**; aka **Brown-Spined Prickly Pear**, **Desert Prickly Pear**, etc.; pads, fruit edible

Mojave presence: native

Comments:

The tulip is easily confused with the **Engelmann's Prickly Pear** (previous page). When in bloom, the tulip's yellow flowers with red-orange base is distinctive. Otherwise, look for the brown color of the spines, though older ones will be whitish like the Engelmann's. The sprawling, rather than erect, habit is characteristic, but occasionally Engelmann's can also be found sprawling! Sometimes best guess is all you can make.



leafcutter bee

a good host

Sub-Family **OPUNTIOIDAE** (Prickly Pears)

Beavertail Prickly Pear (*Opuntia basilaris*)



typical habitat

Dolan Springs, AZ



spineless

Dolan Springs, AZ



March

Red Rock Canyon National Conservation Area; NV



showy flowers

Red Rock Cyn NCA; NV



cordate pads

Red Rock Cyn NCA; NV

- Flowers:** perianthic; bowl-shaped; solitary; bisexual, yellow stigmas/anthers; white, pink, magenta; 3"
- Stems:** flat pads; cordate; sprawling to ascending; many; branched at joints, unstacked; blue green; 6"
- Leaves:** glochids; usually spineless; bristly; straw yellow to red-brown; 1"
- Blooms:** February to June
- Range:** southwestern US; northern Mexico
- Habitat:** sandy to rocky; desert scrublands to juniper woodlands; Lower to Upper Sonoran Life Zones

Notes:

common; shrub-like perennial; grows to about 1' in the Mojave Desert and northern MEX at elevations from 3,000 to 5,000'; 4-19 areoles per diagonal row, depending on subspecies; bristly, yellow to red-brown glochids and usually spineless (except subspecies *O. b. treleasei*); green, bristly, 1.5", dry, berry fruit bearing tan to yellowish seeds; some flowers aromatic (reminiscent of watermelon); aka Beavertail Cactus; 4 subspecies; traditionally used for food

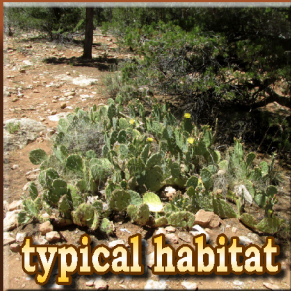
Mojave presence: native

Comments:

This very common cactus is easily identifiable and distinguished from other prickly pears by its areoles usually lacking any spines, but crowded with glochids, and its heart-shaped pads. The Mojave Prickly Pear *Opuntia polycantha erinacea* is one of the few other prickly pears in the Mojave that also occasionally bears vibrant magenta flowers (though usually yellow or peach to orange-red like most cacti).

Sub-Family **OPUNTIOIDEAE** (Prickly Pears)

Polycantha Prickly Pears (*Opuntia polyacantha*)



Grand Canyon NP; AZ



Grand Canyon National Park; AZ



Grand Canyon NP; AZ

- Flowers:** perianthic; bowl-shaped; solitary; bisexual, green stigma, yellow stamen; yellow, peach, pink; 2"
Stems: flat pads; circular to elongate; sprawling; numerous; branched; smooth, succulent; green; 4-12"
Leaves: spines; needle-like; singular to numerous; stiff to flexible; white to brownish; 2-7"
Blooms: May to July
Range: western North America
Habitat: sandy to rocky; desert scrub to pine woodlands; Lower Sonoran to Canadian Life Zones

Notes:

common; perennial; grows as sprawling masses ~1.5' tall to 10' wide, in various habitats throughout western NA from the Great Plains west to the Pacific, w CAN south to n MEX, at elevations of about 2,000 to 10,000'; 6-18 areoles in diagonal rows on pads host glochids and 1-18 spines (variable in habit, color, and size); large, showy flowers of several colors from yellow to bright pink; 2-3" cylindrical to egg-shaped berry fruit bearing many seeds; aka Hairspine Prickly Pear, etc.; 5 subspecies with great variability due to hybridization; tetraploid (4 sets of chromosomes); pads (known as nopales) and fruit are edible (raw, cooked, candied, etc.) and rich in vitamin C and other nutrients. Pads traditionally used as a poultice for cuts, burns and other wounds, and to treat diarrhea and stomach issues

Mojave presence: native

Comments:

The representative shown here at the Grand Canyon National Park in June, 2019, is the Plains Prickly Pear *O. p. polyacantha*. While not native to the Mojave, it is one

Pp6

of the most common of the prickly pear varieties.

Sub-Family **OPUNTIOIDEAE** (Prickly Pears)

Mojave Prickly Pear (*Opuntia polyacantha eriacea*)



Boss Mine; Goodsprings, NV



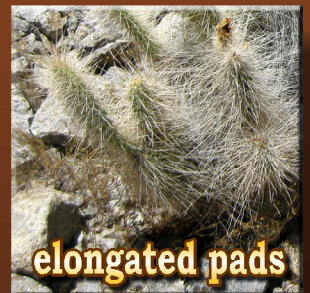
Red Rock Cyn NCA; NV



Potosi Mountain; Clark County; NV



Red Rock Cyn NCA; NV



Clark Mtn; Mtn Pass; CA

- Flowers:** perianthic; bowl-shaped; solitary; bisexual, yellow stamens; yellow, peach, seldom magenta; 2.5"
- Stems:** flat pads; elliptical; shrubby to sprawling; lightly branched; smooth, succulent; blue green; 5"
- Leaves:** spines; smooth; dense, coarsely matted, descending; flexible; white to tan; to 7"
- Blooms:** May to July
- Range:** Mojave Desert
- Habitat:** gravelly to rocky; desert scrub to pinyon-juniper woodlands; Lower to Canadian Life Zones

Notes:

common; perennial; grows as shrub-like clusters to 2' tall, 10' wide, throughout most of the Mojave Desert north into the Great Basin Desert at elevations of up to 10,000'; frost tolerant; 8-14 areoles per diagonal row, each with 1-18 spines; dry, spiny, bur-like, greenish-red fruit; aka Grizzlybear Prickly Pear, Hairy Prickly Pear, Old Man Prickly Pear; common hybridization

Mojave presence: native

Comments:

It's obvious from its shaggy appearance why this common Mojave-region prickly pear got its various monikers. I'm surprised bearded prickly pear isn't among those names. Even when not in bloom, this species is easy to identify. Though the Porcupine Prickly Pear *O. p. hystricina* (next page) is very similar, its spine are not as long and flexible.

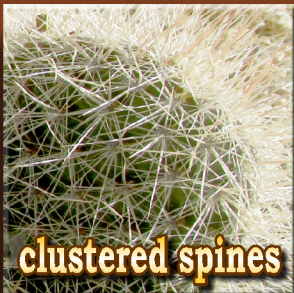
Sub-Family **OPUNTIOIDEAE** (Prickly Pears)

Porcupine Prickly Pear (*Opuntia polyacantha hystrixina*)



typical habitat

Dolan Springs, AZ



clustered spines

Goodsprings, NV



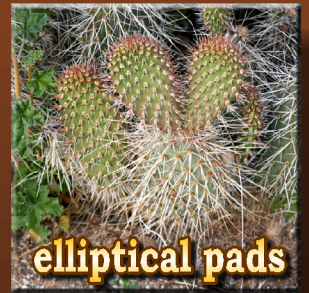
June

Red Rock Canyon National Conservatiom Area; NV



showy flowers

Dolan Springs, AZ



elliptical pads

Dolan Springs, AZ

- Flowers:** perianthic; bowl-shaped; solitary; bisexual, green stigma, yellow stamen; yellow, peach, pink; 3"
- Stems:** flat pads; elliptical to obovate; shrubby; lightly branched; smooth, succulent; blue green; 5"
- Leaves:** spines; smooth; dense; straight, stiff to wispy; white to brown; 3.5"
- Blooms:** May to July
- Range:** western to southwestern US
- Habitat:** gravelly to rocky; desert scrub to montane woodlands; Lower Sonoran to Canadian Life Zones

Notes:

common locally; perennial; grows 1.5' tall to 9' wide in various habitats of the Great Basin region east to the Colorado Plateau, south to AZ/NM (isolated population in the Clark Mountain Range in San Bernardino County, CA) at elevations of up to 9,000'; 8-10 areoles per diagonal row, each with 0-6 spines; dry, somewhat spiny, green to tan fruit; intergrades with *O. p. erinacea*

Mojave presence: native

Comments:

Uncommon to rare in the Mojave, this polycantha variety is very similar to the Mojave Prickly Pear *O. p. erinacea*, and difficult to distinguish where their ranges overlap in the transition between the Great Basin and Mojave Deserts. However, it generally produces fewer and shorter spines per areole, thus is not as shaggy looking as its close relative.