Panther Path
Self-guiding Nature Trail

Big Bend National Park
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Welcome to the Chihuahuan Desert

As you drive through the desert country, the life forms tend to blend into one great greenish-brown blur. If you take a few minutes to stroll through this desert garden, you can bring into focus many of those individual plants and perhaps a few desert creatures that share the same piece of earth called the Chihuahuan Desert.

This numbered path takes you into a typical scene of the desert country which comprises nearly 98% of the total park land. The plants growing here all have one thing in common: they grow in an arid environment. Consequently, they protect their precious moisture with spines, needles, thorns, claws, waxy leaves, wax-sealed stems, leaf-shedding during dry periods, or some other device not easily discernible.

While the desert makes one think of cactus, not all plants with needles, bristles, or thorns are members of the cactus family. A few of the desert plants that are often incorrectly called “cactus” include the yuccas, century plant, and the ocotillo.

The origin of the cactus family still remains a mystery, although it may possibly be related to the rose. Members of this family have an amazing ability to absorb water before it is lost in the dry desert soil. They are equipped with a formidable array of spines. These spines, actually modified leaves, conserve moisture and deter animals from feeding upon the plant. All cactuses (or cacti) have in common a remarkable growth system of buds, called areoles, which produce the flowers, spines, and fruits.

This well-adapted group of plants originated in the Western Hemisphere and includes 1000-1500 species distributed from Canada to southern South America.

1 Creosotebush (Larrea tridentata)
One of the most common plants of the Chihuahuan Desert and the source of the “smell of the desert.” Crush a leaf between your fingers and sample this characteristic desert smell. The tiny yellow flowers of spring and summer give rise to fuzzy fruits.

2 Whitethorn Acacia (Acacia constricta)
A common shrub or small tree found throughout the Big Bend region. It produces very fragrant yellow flower balls from April to August. The woody stem turns purplish in the winter and in spite of its name, it may or may not have thorns.

3 Engelmann’s Prickly Pear (Opuntia engelmannii)
An abundant cactus species, it blooms in the spring, and the large yellow flowers give rise to purplish-red fruits or “tunas.” Javelina eat the pads, spines and all, and many birds and other animals eat the fruits. Syrup, jelly, and wine can be made from the tunas.
4 Lechuguilla
(Agave lechuguilla)
Submed, a small relative of the century plant, which you will see later, blooms only once in its lifetime. The spearlike flower stalks stand tall across the desert like a spindly forest. The short rigid leaves are tipped with sharp, brittle points that you will long remember if you blunder into one. Fibers from this plant are still used to make rope in Mexico.

5 Eagle Claw Cactus
(Echinocactus horizonthalonius)
Also known as Turk’s Head Cactus, this cylindrical or pyramid-shaped cactus is usually found alone rather than in clumps. It produces a brilliant rose-red flower anytime throughout the summer when rainfall is sufficient.

6 Brown-flowered Cactus
(Echinocereus rusanthus)
The cylindrical stem sometimes branches to form clusters or colonies. The small, rusty-red, funnel-shaped flowers do not open very wide. Very abundant below 5,000 feet, favoring igneous-derived soils.

7 Rainbow Cactus
(Echinocereus dasyacanthus)
This cactus usually has a single stem, but sometimes branches or clusters with old age. The yellow to rose flowers are produced in the spring. The stem may have ridges of tan, yellow, and white spines with reddish tips, giving it a rainbow appearance.

8 Cane Cholla
(Opuntia imbricata)
Pronounced CHOY-ya, this cactus flowers from April to June. The knobby yellow fruits remain through the winter months. New plants sprout from stem joints that fall to the ground.

9 Giant Fishhook Cactus
(Ferocactus hamatacanthus)
A large heavy cactus with broad ribs, its long spines are hooked on the ends, giving it its name. The yellow flowers appear from May to July. Farther along the path, there is a much larger specimen.

10 Nipple Cactus
(Mammillaria meiacanthai)
If you take a close look, you will find that this plant is a single flattened hemisphere with spiraling rows of nipples. The clustered flowers are vary from whitish or pale pink to brown in color and often make a complete circle around the top of the plant. It usually grows near sheltered areas in the Chisos foothills.

11 Brown-spined Prickly Pear
(Opuntia spinosibacca)
This prickly pear is easily distinguished from the others by its translucent brownish spines. The flowers are usually yellow, often with reddish centers, and appear from April to July. It is found abundantly in the Boquillas Canyon area.

12 Yellow Trumpetflower
(Tecoma stans)
The bright yellow trumpet-shaped flowers are produced from June to October, and are favorite sweet treats for hummingbirds and bees.

13 Thompson Yucca
(Yucca thompsoniana)
When older, this yucca—a member of the agave family—may fork, producing a flower stalk from each of its heads. The ivory-colored flowers are eaten by both humans and wildlife.

Take a break and look around
Stop for a moment and look up toward the mountains in front of you. These peaks form part of the Chisos Mountains. These mountains are a biological island in a desert sea. The pine–oak–juniper vegetation in the higher, cooler, wetter elevations contrasts with the many desert plants around you. This mountain/desert difference is one of the special aspects of Big Bend National Park.

Panther Peak, on the right, is named for the mountain lion whose habitat encompasses not only the mountains but also the desert. The left is Pummel Peak, so named because of its likeness to a saddle pommel. Wright Mountain, between the two, is named for the founder of the Wildlife Division of the National Park Service.

14 Soaptree Yucca
(Yucca elata)
Ever shampoo your hair with a plant? The Indians did, with an extract from the roots of the soaptree yucca. You can recognize the soaptree by the whitish fibers on the leaf margins. Soaptree yucca is the tallest yucca in the Big Bend; some individuals may grow as tall as 30 feet.

15 Cob Cactus
(Coryphantha tuberculosa)
Appearing somewhat like an old corn cob, this cactus usually grows as a clump of branched stems. Commonly found in desert limestone habitats; it produces small pale pink flowers from April to August.
16 Torrey Yucca
(Yucca torreyi)
This is the hairy-looking yucca. The torrey yucca is the most common yucca in the Big Bend, and can be found throughout the park. It may flower at any time of year (especially March and April), producing a large stalk of white flowers that appear to illuminate the desert by night. The Torrey has edible fruit and flowers.

17 Giant Dagger Yucca
(Yucca faxoniana)
This is the largest of the Big Bend yuccas, sometimes growing over 20 feet high. Commonly found only in the Deadhorse Mountains in the eastern portion of the park. It blooms in the spring, and a single flower stalk may weigh as much as seventy pounds and contain over 1,000 individual flowers. The rigid dagger–like blades offer excellent support for bird nests.

18 Tasajillo
(Opuntia leptocaulis)
Pronounced tah–sah–HEE–yo, this small highly branched cactus is in the same group as the chollas and prickly pears. Its main trunk develops a scaly bark with age and usually grows entangled with other plants. The red fruits remain on the plant through the winter, giving it a second name—desert Christmas cactus. It is also known as pencil cholla.

19 Purple-tinged Prickly Pear
(Opuntia macrocentra)
No, it’s not sick; although many species of prickly pear turn purple when stressed by heat, cold, or drought, this species is often-times purple all year round. Yellow flowers, often with red centers, appear from April to July. Commonly found in sandy soils below 4,000 feet.

20 Tarbush
(Flourensia cernua)
One of the most abundant shrubs of the Chihuahuan Desert, this plant produces sticky yellow flowers from September to November. Press a few of the leaves together and notice how they stick to each other. This water-conserving feature gives the plant its name.

21 Guayacan
(Guaiacum angustifolium)
Related to creosotebush, this gnarled shrub can grow to six feet tall. It has very hard stems and dark green compound leaves. The small purplish to white flowers appear anytime from May to October when conditions are right. They produce one of the most beautiful fruits of all desert plants—a scarlet red covering over a single black seed, usually two seeds per winged pod. The fruits are a favorite food for wildlife, especially quail.

22 Nolina
(Nolina erumpens)
Because the Indians used the leaves of the nolina to make baskets, sandals, and other articles, it is sometimes called basket grass. The large flower stalks, rubbery in texture, usually do not extend far above the long grasslike leaves.

23 Sotol
(Dasylirion leiophyllum)
The flowering stalk of the sotol can reach 20 feet in height. Unlike the agaves, the sotol blooms repeatedly during its lifetime. Indians used the sotol for many purposes. The fibers in the leaves were braided into mats, ropes, and other articles, and the cabbage–like base that remained after the removal of the leaves was roasted and eaten. A very potent drink, also called sotol, is distilled from the spongy trunks.

24 Blind Prickly Pear
(Opuntia rufida)
Most numerous in drier portions of the park, this cactus does not have long spines. Instead of visible spines, the blind prickly pear uses glochids—thousands of tiny bristles—which are present on most prickly pears. The name of the species is derived from the fact that the glochids do not appear to present a sharp threat. Look for blossoms in April.

25 Honey Mesquite
(Prosopis glandulosa)
The oldtimers of Big Bend used to say that you had to “dig for wood” (mesquite roots) and “climb for water” (windmills). The roots of the mesquite are able to grow down to 60 feet to reach the water table. In earlier years, the seed pods were used extensively for food, being ground into a coarse flour and baked as a cake.
26 Ocotillo  
(*Fouquieria splendens*)  
This branching plant is often mistaken for a cactus, but it is really in a family all its own. Brilliant clusters of crimson flowers crown each branch in early spring. Tiny green leaves will appear only after adequate rainfall. Early settlers constructed “living fences” for corrals and other enclosures—the ocotillo has the ability to grow when only the stem is placed in the ground.

27 Lotebush  
(*Ziziphus obtusifolia*)  
This shrub often forms thickets that provide excellent cover and food for wildlife, especially quail. The bluish gray to green leaves help identify this spiny shrub. The fruits, green when they first appear, are purplish when ripe.

28 Candelilla  
(*Euphorbia antisyphilitica*)  
The candelilla, or wax plant, is protected from heat and water loss by a waxy substance that covers the slender stems. Processing this wax was a major industry before the park was established in 1944. The wax industry is still operating in Mexico. The hard wax is used in polishes, chewing gum, soap, and similar products.

29 Leatherstem  
(*Jatropha dioica*)  
The name comes from the flexible, leathery maroon-colored stems. Similar to the ocotillo in that it will produce leaves in response to precipitation. The Indians had a number of uses for the plant, one of which was the red dye that they extracted from the roots.

30 Big Bend Silverleaf  
(*Leucophyllum candidum*)  
Also called purple ceniza, this is the smallest of three cenizas that are found in the park. Look for dark purple flowers after summer rains. At any time of the year its silvery leaves set the plant apart from its green and brown surroundings.

31 Century Plant  
(*Agave havardiana*)  
This particular agave is common in the mountains of West Texas above 3,800 feet. Agaves live for 15 to 55 years (not a century), blossom once, then die. The water and food needed for the final burst of growth are stored in the heavy succulent leaves. Mescalero Apaches roasted and ate the base of the plant, and fermented from it a ceremonial drink called mescal. Birds, insects, and many other animals feed on the flowers of the agave.

32 Strawberry Pitaya  
(*Echinocereus stramineus*)  
Similar in appearance to other pitayas, the strawberry cactus grows in rounded compact clumps. The large pinkish-red flowers are produced following adequate rainfall during the spring or late summer, and the ripe fruits taste much like strawberries.

Perhaps it is time to explore another environment. The cooler pinyon-juniper forest of the Chisos Mountains is accessible via the Lost Mine Trail, which begins along the Basin Road. Or compare these desert plants with those along the river by walking the Rio Grande Village Nature Trail. Self-guiding brochures are available for both trails.

If you would like to learn more about the desert, walk the Chihuahuan Desert Nature Trail at Dugout Wells. A cottonwood grove there provides a cool retreat and an excellent place to watch birds.
The Big Bend Natural History Association, established in 1956 as a private, non-profit organization, champions the mission of the National Park Service in facilitating popular interpretation of the scenic, scientific, and historic values of Big Bend and encourages research related to those values. The Association conducts seminars and publishes, prints, or otherwise provides books, maps, and interpretive materials on the Big Bend region. Proceeds fund exhibits, films, interpretive programs, seminars, museum activities, and research.

Authorized by congress in 1935, and established in June 1944, Big Bend National Park preserves the most representative example of the Chihuahuan Desert ecosystem in the United States.

As conservation educators, the park’s Division of Interpretation and Visitor Services provides guided walks, talks, evening slide programs, workshops, and other educational activities as well as written materials such as this trail guide.