THE BEAUTIFUL GARDENS OF OUR GREAT WESTERN DESERTS: BY ROSALIE JONES

The deserts to some people are as beautiful as "Eden's radiant fields of asphodel"; to others they are fearsome places, terrible as the enchanted forest described by Dante, whose trees were human creatures writhing in torment. Those who think the desert an accursed spot full of venomous serpents, poisoned springs, vicious beasts and barbed plants have never seen its tender beauty in the spring, have no knowledge of its wonderful place in the economy of Nature, no perception of its great influence upon the atmosphere of the world. Scientists tell us that it may not be wise to turn these heat generators into moist fields and thus alter the balance of humid and dry air. Perhaps they serve us more vitally in tempering, sweetening and purifying the air we breathe than though they yielded us rich harvests of grain.

The plant life of the desert is one of the most miraculous things on earth. The plants are wonderful stoics, and although they bristle with claws and barbed daggers we cannot but admire the manner in which, in spite of their starved existence, they manage to fit themselves to resist attacks of enemies and to endure the pitiless droughts. They are really heroes in a way, for they have won a battle that those with feeble adaptiveness and with less powers of resistance would have lost utterly.

Even the fiercest of warriors have their bright hours of joyous rest between battles, tender hours when swords are laid aside and suits of mail exchanged for soft velvet robes. So with the plant warriors of the desert there comes in the season of soft winds and gentle rains a time when their defensive armor, if not exactly laid aside, at least is decorated with the gayest of silken flowered scarves, when their heads are crowned with the blossom wreaths of peace and when every sword and dagger point is tipped with tender, fragrant flower flames. In no place on this earth does spring come more magically, more wonder-fully than in the desert. Every barb, and thorn and spine, sharper than any needle point of steel, for a brief, happy time is sheathed in bright flower gauze, silks and velvets that glisten for but a day. Baby blue-eyes, violets, yellow mimulus, white owl's clover, wild verbenas, portulacea, phlox, evening snow and sunshine follow the spring rains so quickly that it seems as though a glorious carpet had been laid in those sandy places over night.

Gay companies of flowers spring into sight and rush over the ground with whirlwind speed. They circle every rock as though they were children playing ring-a-round-a-rosy, they rim every crack and paint the hills with pastel shades. These tiny spring carpet-flowers
have need to hurry, for their stay is short. They spring to life, leave
their seed and depart in but a few weeks' time. Scarce a dry stem is
left standing upon the sands to testify to the spring frolic. It is a
miracle how their seeds, covered by the wind flurries for their ten
months' sleep, ever survive the heat and live to repeat again the pretty
miracle of spring.

Of all the hardier spring desert growths the opuntias are the most
common. One section of this great genus is the familiar flat-
stemmed, oval-jointed prickly pear or tuna; the other the cholla
cactus, elongated, cylindrical-jointed. The prickly pear would soon
have been exterminated had it not covered itself with bristling, sharp
needles, for its fruit is sweet and juicy and its leaves full of nutrition.
Cattle-men feed it to stock after burning off its bristles; but Luther
Burbank has found a way of growing it without bristles, as all the
world now knows. The flowers are about three inches in diameter,
yellow as gold or flaming red according to the variety, and are borne
around the rim of the flat, saucer-like joints. In some arid regions
of southern California, a species is found bearing large rose-magenta
flowers upon almost spineless lobes, though in place of the sharp spines
it is covered with minute bristles almost more annoying than the
longer, sharper spines of its relatives. The barbed spines of the chol-
las are about one and a half inches long and are covered with a paper
sheaf which slips off at the slightest touch. The dried and hollow cy-
linders with which the desert is so thickly strewn and which are such
objects of curiosity to strangers are but old sections of this plant. In
the spring every cylinder of this queer plant is crowned with purplish-
red bloom. The chollas, which reach to a height of seven feet or more,
grow in such dense jungles that it is almost impossible to penetrate
them, therefore a colony of them is a favorite retreat for the birds who
nest therein safe from the reach of the dreaded rattler, who never ven-
tures to force a way among those sharp thorns.

The saguaro or giant cactus is called the "sentinel of the desert." Tall
and straight it stands there on the plains, and therefore has won
the name "fence-post cactus." A variety with arms branching like
a candlestick is the candelabrum species, while the "Laocoos" variety
resembles the ancient statue in the bristling of its many branches.
This last is found mostly in the foothills. The saguaro sometimes
grows as tall as forty feet. All these cacti are punctured here and
there by birds who find therein excellent protection for their nests.
The red-shafted flicker taps their fluted exterior and builds a cool nest
within. The tiny elf owls are also saguaro tenants. This cacti has
great water-storing capacity and scientists tell us that their accordion-
pleated sides expand in the rainy season and shrink in the dry. The Bismaga or barrel cactus, so called from its shape, is very valuable to the travelers. By removing a slice from the top with an axe and pounding the pulp, a sweetened juice is obtained, called Pitanaya Dulce. This drink in its fermented form is used freely by the Mexicans. They also make most delicious candy from it.

CREOSOTE or greasewood bushes are found in symmetrical rows about ten feet apart and give the desert a cultivated appearance. They grow about three feet high and are called “sand-holding bushes” because they are said to keep the sand from drifting. After a rain or when bruised, they exude a resinous odor which is balm to the poor consumptive who has sought this spot in hope of recovery. The ocatillo, often called candlewood, which appears to have no near relation, has a fearsome array of thorns all along its graceful branches. In dry weather it seems to deserve its name, “the devil’s coach whip,” but the spring rains transform it into a thing of beauty. Tender green leaves cover the spines which, however, drop off as soon as the drought begins, and from the end of each branch shoots a long scarlet flower, a veritable tongue of flame. Nothing could be more startlingly beautiful than this plant when in bloom, though for most of the year it stands like a bundle of dry sticks and looks not unlike a giant’s hand thrust through the earth, clawing the air with vicious intent, or like some huge octopus ready to drag the unwary within its cruel net.

Another fantastic, demoniacal object is the Joshua tree. It is a scraggily, dangerous-looking thing,—every leaf a dagger, every flower fetid and uncannily colored. The Indians grind its seed into a coarse meal which they eat raw or cook into a sort of mush. No one voluntarily ventures near this cruel-looking tree, though it is strangely picturesque against a night sky.

The mesquite, with its queer screw pod, the palo verde and depua and palo breya are bright with narrow leaves that hang diagonally or perpendicularly to the sun, thus cleverly avoiding the direct rays that would rob it of its precious moisture. The Crucifixion thorn looks somewhat like the palo verde except that it has no leaf whatsoever. It is all thorn, for each twig ends in a sharp spike. There is hardly a spot on its whole bristling surface tender enough for a blossom to open a way to the light. Its small yellow flower makes but a brief appearance upon one side of a spike momentarily softened by rain.

One of the most beautiful things of the desert is the Lluvia d’Oro or “shower of gold.” Its willowy grace is most conspicuous among its stiff neighbors. It is somewhat like a white birch as to stem, and
IN THE SEASON OF SOFT WINDS AND GENTLE RAINS, every bristling plant of the deserts, mesa lands and dry valleys of the West is crowned with flower color: The sharp barbs of the cacti are sheathed in bloom and the ground literally spread with a carpet of flowers gorgeous in color, that fill the air with Oriental fragrance.
ONE OF THE MANY VARIETIES of cholla cacti found in the desert of southern Arizona: In the spring every branch is tipped with silken petaled flowers of wonderful color.

The dried and hollow cylinders with which the desert is so thickly strewn and which are such objects of curiosity to strangers are sections of the cholla cacti. This bush is a favorite nesting site of a little bird called the cactus wren; in this bayoneted home she is safe from the intrusion of her enemy, the deadly rattler.

In the spring this desert fighter increases its size by putting new sections or joints on every old stem: The young branches, being provided with hooked barbs, adhere to every passing animal or are broken off by the winds and thus are carried far away from the parent plant. They quickly take root and a new plant is started.

THE CHOLLA CACTI such as is shown on the right grows sometimes to a height of seven feet or more: The barbed spires are often an inch and a half long and covered with a paper sheath which slips off at the slightest touch.

In the spring every cylinder of this plant is tipped with purplish red bloom of great beauty.

Small animals, serpents and even the birds may be found at the pitiless noon hour seeking the slight shelter from the sun provided by the thick column of the cholla cactus.

Associated with this cactus is often found the Yucca or Spanish bayonet, that lifts so superb a stalk of bells above its sharp-pointed sword-like leaves.
SAGUARO CACTUS such as is shown at the right is often called the "sentinel of the desert"; This barbed giant under the spell of tender spring rains wears a crown of gay blossoms; A good view of the accordion-pleated sides is here given: There is nothing stranger in the whole plant world than a forest of these deeply ribbed branchless cacti: One could easily fancy himself in the fabled forests of mythological days: On a dark and stormy night they look like giants marching in battle.

"THE FENCE-POST" CACTUS, a species of the saguaro cacti, as shown in the photograph at the left, well deserves its name: It is tall and straight and almost without branches: Its many-branched relative may be seen in the background: The "fence-post" cacti is often punctured by birds who find therein a cool, moist, secure nesting site: Travelers under the stress of dire necessity often chop a fence-post cactus near the base and draw the water which it has somehow managed to store: Such moisture has often saved the life of people lost in the deserts.
THE STRAIGHT SAGUARO CACTI and the airy palo verde are often to be found closely associated: The contrast of textures makes a most interesting desert picture:

The palo verde tree shown below sometimes grows to a height of fifty feet and is therefore one of the highest plants of the desert: In the spring when covered with yellow flowers it is a thing of great beauty: The leaves are long and narrow and hang diagonally or perpendicularly to the sun, thus conserving their precious moisture with almost human intelligence:

Though the shadow cast by this tree upon the ground is never dense, nevertheless it is often gratefully taken advantage of by wayfarers as well as animals: The tree's feathery beauty makes it a conspicuous object among the angular leafless growths with which it is associated: Its silver green foliage is extremely effective against the gold of the desert and the amethystine atmosphere.

THE OCATILLO, or "devil's coach-whip," during most of the year resembles a bunch of dried sticks of some giant's hand upthrust from the earth: In the spring, however, every barbed stick is tipped with a wonderful flame colored flower: Nothing more marvelous is seen in the whole vegetable world than this dangerous looking object when in full flame.
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when its long drooping branches are covered with gold blossoms, it is indeed a lovely thing.

It would weary any one but a desert lover to listen to an enumeration of each plant that defends its position upon the sand or alkali soil so vigorously or to read in detail of the cacti that look like sleeping porcupines, giant pin-cushions or green watermelons suddenly sprouting thorns, or of how cleverly they store the rain that falls but rarely, in huge reservoir roots, or coat their stems with a varnished gum that makes evaporation impossible, or bore a way far down through dry rocks in search of moisture, or hold intruders at bay with barbed, hooked, spiral and saw-shaped thorns often viciously poisoned as well. But with all their interesting differences they have one peculiar trait in common, and that is they are indigenous to America; some extend down into Mexico, a few even to South America, fewer still are found in the West Indies. Along the Mediterranean coast it has been naturalized and is known as the Indian fig; Africa is said to have a few cacti, but the one thousand or so known species are mostly restricted to America. They are mainly found in Arizona, New Mexico and southern California and seem to have been developed in these basins of heat to show the marvelous resourcefulness that Nature displays in covering every spot of this world with beauty.

In those desert furnaces, companioning those thorny plant fighters, are strange hardy animal folk armored with sharp claw and horn, barbed and bristling as any cacti. The fabled salamander, nourished by flame though he is said to be, exists no more marvelously than those desert creatures. The slow moving, soft toad of lush green gardens is horned and swift as a flash, in the desert; owls lacking trees burrow in the ground like any rabbit seeking cool darkness; lynx, cougars, wild cats are lean and unusually keen eyed, and the forked tongues of serpents are tipped and poisoned. The animals like the rabbits, antelope and sheep, who cannot frighten their enemies by daggers or poison, have been given the gift of swiftness—like the wind is their flight when frightened. All the animals are lean, sparsely fed as anchorites. Few are the feast days for them in that burning land.

At night a new glory comes to the desert garden, that of stillness. Those who have missed the exalted experience of a night in the desert have no knowledge, no understanding of the word peace. The night reveals a new world. The mirage of a lake in a waterless land is a wonderful thing to see, but the still world and the glittering sky above it is even more miraculous. Blueter than the sea is the night sky and the stars shine with an immeasurable brightness.