

The Wildlife of Villa dei Fiori



Villa dei Fiori lies on the boundary of the Joshua Tree National Park. Unconcerned about man's boundaries, the Bighorns leave the park for the boulders of Villa dei Fiori where they can out maneuver a predatory mountain lion with their uncanny rock climbing abilities. A great danger to the Bighorns is when they come into contact along the park border with domestic sheep that carry bacterial pathogens which can cause an outbreak of infectious pneumonia. The pathogens can transmit rapidly through the herds, resulting in die-off that can kill a majority of the population.



The Bighorn sheep, *Ovis Canadensis*, originally crossed from Siberia over the Bering land bridge to North America around 750,000 years ago. The horns of a three-hundred-pound ram can weigh 30 pounds. Three hundred years ago when the Europeans came to America, the Bighorn population was over two million, but by 1900 they were reduced to a few thousand because of livestock diseases and over hunting, a fate it shared with the American Buffalo. The Arizona Boy Scouts began a campaign in 1936 to save the Bighorns and they flourish in the Joshua Tree National Park today.



Bighorn sheep live in large herds and do not usually follow a single ram leader.

Prior to the mating season, to determine access to ewes for mating, the rams establish a dominance hierarchy by rushing at one another in ferocious head butts, the combat sometimes lasting 24 hours. Bighorns live ten to fifteen years can travel at 30 miles per hour, and climb mountain slopes at 15 miles per hour, swimming easily despite their great bulk and the weight of their horns. Ewes are protective of their lambs for many months. Due to the extreme temperatures, only one-third of the lambs will survive their first summer.



During the winter, Bighorns can get their water solely from green vegetation, but during the summer when temperatures become extreme, they visit water holes two or more times a week. Bighorns rely on desert plants for food and moisture using their hooves and horns to remove spines from cacti to eat the juicy moisture inside, preferring the tender shoots of the prickly pear cacti, cholla, and the flowers of agave and squaw grass. Their complex 9-stage digestive system allows them to achieve the maximum removal of nutrients from food of minimal quality. The gregarious Bighorns travel in herds, which provides them from protection from coyotes and cougars, their acute eyesight allowing them to judge distances when leaping from boulder to boulder as elegantly as a ballet dancer, their keen eyesight enabling them to watch predators from one mile away.



A family of Gambel's quail, *Callipepla gambelii*, with fourteen chicks. Attracted to the irrigation basins at Villa dei Fiori, they dine on seeds, the tiny chicks rolling in the dirt fluffing their feathers in a sand bath. Within hours of hatching they leave the nest capable of following their parents up the steepest boulders. When a chick falls out of line, mama quail circles behind and drives the chick back into the flock. While the chicks forage for seeds, one parent perches on a high boulder, a sentinel watching for predators.





A chuckwalla lizard on a pyracanth plant. When threatened by a predator, they fill their lungs with air, puffing up to appear more imposing.



Chuckwallas hibernate in winter and emerge to mate from April to July.



Although the Chuckwalla can look ferocious, they are quite harmless.



Primarily herbivorous, Chuckwallas are partial to the yellow flowers of the brittlebush and can live for more than 25 years.



The legendary roadrunner and snake killer.

The roadrunner, *Geococcyx californianus*. can run at speeds of 20 mph and occasionally at 26 mph, running down its prey --- spiders, tarantulas, scorpions, kangaroo rats, birds, lizards, and snakes. Roadrunners make short work of rattlesnakes, holding its prey in its bill and slamming it repeatedly against the ground. A member of the cuckoo family, the bird is monogamous forming long bonds with its mate, the male collecting the material and the female constructing the nest. Wile E. Coyote may chase the roadrunner in the cartoons, but in real life, coyotes don't go after the bird because they know the roadrunner is too fast and too smart to catch. In winter, the bird opens its wings and warms its inner downy feathers, sunbathing in the warmth of the sun. The Hopi Indians believed that the roadrunner protected them against evil spirits.



The red racer, *Masticophis flagellum*, a non-venomous snake, is valuable for keeping the rat population under control. Also known as the coachwhip snake, it is faster than the average human, capable of slithering at fifteen miles per hour.



Mojave Green rattlesnake, *Crotalus scutulatus*, has a neurotoxin considered to be the most debilitating and deadly of all rattlesnakes. Anti-venom treatment as soon as possible after a bite is critical for survival.



Baby hummingbirds awaiting mama to bring them bugs, spiders, and nectar for breakfast. Mama constructs a nest the size of a ping pong ball, lays two eggs the size of a jelly bean and incubates the eggs for about 15 days, protecting them from predators. The babies are actually one-twentieth the size of the photo --- hard to imagine how tiny they are. Only the females care for the little eggs, chasing away a male hummingbird whose bright iridescent feathers might attract predators. If someone gets too close to her nest, a fierce mama will dive-bomb them with her razor-sharp beak. After drinking nectar and eating bugs, every twenty minutes, mama regurgitates the slurry food that the babies can digest. At three weeks of age, they are trying out their wings preparing for flight and soon fly from the nest, the mama still feeding her kiddies for a few more days, showing them how to catch bugs and get nectar before chasing them off to live on their own. Astoundingly quick, the hummingbird can dive at 34 mph and some at nearly 50 mph. Their heart rate can be as high as 1,260 beats per minute, and during flight, their oxygen consumption per gram of muscle tissue is about ten times greater than elite human athletes.



The white-tailed antelope squirrel, *Ammospermophilus leucurus*, says grace before a dinner of cilantro. Marked with a white antelope stripe on its flanks and a fluffy white tail, with its lithe scampering frolics, the antelope squirrel is one of the cutest creatures at Villa dei Fiori.





The Desert Spiny lizard, *Sceloporus magister*, adjusts its internal temperature by changing color, darker during cooler months to allow more heat absorption from the sun, turning lighter in summer to reflect more solar radiation. During the hottest hours of the day, the Desert Spiny lizard seeks shelter in an underground burrow. In winter, it goes into hibernation, re-emerging in spring.



Sphinx the Lynx.

Bobcats hunt nocturnally making them difficult to spot in the wilderness. The bobcat we called Sphinx was different than other bobcats. Fascinated by people, at twilight she clandestinely observed me for weeks before she decided to venture closer, reclining on the boulders to watch me as I gardened or did aerobic dance. She felt so safe at Villa dei Fiori that she established her den and birthed three kittens in the boulders outside my bedroom. Bobcat kittens are born in spring, nurse for two months before eating solid foods. At five months, the mother teaches her young how to hunt. Around eight to eleven months of age, mama forces them out of the den, leads them to a new territory where they must survive alone.



Bobcats are color coordinated with their habitat. They see you, but you don't see them, The bobcat, *Lynx rufus*, is believed to have evolved from the Eurasian lynx, which like the Bighorn sheep, crossed over the Bering Land Bridge during the Pleistocene era 2.6 million years ago. Isolated by the glaciers of the ice age, they evolved into the modern bobcat around 20,000 years ago.





More aggressive than Canadian Lynx, the bobcat is known as the “Spitfire of the Animal Kingdom.” Bobcats do most of their hunting in low-light conditions, waking up three hours before sunset to hunt, falling to sleep around midnight, then waking up an hour before dawn to hunt again. Some studies suggest they adjust their hunting schedules on the lunar cycle. Adult bobcats can weight up to thirty pounds. Although they eat rabbits, birds, reptiles, fish, and rodents, they can kill adult white-tailed deer as large as 250 pounds by jumping on the deer’s back and biting through the throat. Excellent tree climbers, they catch nesting birds and can pounce on deer from tree limbs. Solitary hunters, their territory can range up to 18 square miles. The bobcat will often stake out two or more different shelters, filling the cave with dead plants for bedding, moving their kittens from one den to another on a regular basis to throw predators off their kitten’s scent.



For the American Indians, animals were their totem figures. A totem serves as a symbol for a group of people, a clan, a tribe, and even a person. The totem has powers imbued with the spirit of God. To some tribes, there are taboos against killing clan animals, as humans are kin to the animals whose totems they represent. In Joshua Tree, our wild animals are our totem figures. We share the same feelings about the bobcat as we do about the Mojave tortoise, Chuckwalla lizard, Kit fox, coyote, roadrunner, hummingbird, Gambel's quail, Great Horned owl, Red-tail hawk, and the regal Bighorn sheep. Our animals, reptiles, and birds form the spiritual essence of our land. Indians believed wild animals were a gift from the Great Spirit. For primitive man there was no separation between man and the spirits of nature. Everything has a soul. All things are divine.



Sphinx the Lynx reigned over Villa dei Fiori