

Large Print

Tortoise Walk

Interpretive nature path

Snow Canyon State Park.

[Braille Ready File .BRF available here](#)



Table of Contents:

Trail Information

Stop 1. Tortoise Walk.

Stop 2. In the Cool Depths.

Stop 3. Life on Their Own.

Stop 4: How Do the Lucky Few Survive in the Desert?

Mojave desert tortoise illustration

Stop 5: Protecting the Vulnerable

Stop 6: What Can You Do to Help?

Final Stop: Benches and Tortoise Sculpture

Trail Information

This short walk is less than a quarter mile. It is a wide, flat, firm, and stable path with a crusher fine surface. This guide includes the text and visual descriptions for the six trailside signs along the path. Resting benches and a granite sculpture of a larger-than-life tortoise, about 2 feet tall and 5 feet across are at the end of the path. The actual size of a mature Mojave Desert Tortoise shell is about 12 inches. The signs along the trail teach visitors about the Mojave Desert Tortoise, its adaptations, and its survival.

Each sign is 20 inches wide and 36 inches tall, mounted on an upright plank of steel a few inches wider than its sign, and stands 7 feet tall. The top of the steel is cut at an angle. The dark color of the steel and the angled top is inspired by the black lava rocks jutting out of the rich orange and red sand and stone that dominates the landscape.

Stop 1. Tortoise Walk.

The sign features a desert tortoise walking across red and black stones. His shell is a high dome, flattening a little at the top. He is a dark grey-brown and dusted with red sand as though he's walked out of a sandstorm. He walks with his elbows outward and his fat black claws protrude forward from his feet that are slightly turned inward. Overlapping diamond-shaped scales look and function like armor. five fat claws protrude from the front of its feet. He walks with his elbows out and the black claws pointing slightly inward. His neck is stretched long with his head held almost as high as the top of the shell. His face is a

squarish beak shape with eyes set wide apart near the top of his head, two closely spaced nostrils at the same height pointing toward the viewer. A wide mouth splits across his face. The shape of his mouth arches up from the corners and then points downward in the center like a bird's beak without protruding far from the lower half of his mouth. Photo courtesy of Seth Topham.

The main text reads: An adult desert tortoise is the ultimate survivor. Imagine carrying your home on your back, surviving summer temperatures that can reach 117 degrees, staying hydrated in a place that averages only 7.5 inches of rain annually, and finding your meals in the surrounding desert habitat.

Desert tortoises survive this and more. Take a stroll and learn more about this Mojave Desert species, their Snow Canyon home, and how you can aid in their survival.

An acknowledgment at the bottom of the signs reads, The generosity of Friends of Snow Canyon State Park, John C. Kish Foundation, and the Erika Lockhart Trust made this trail and exhibits possible.

Stop 2. In the Cool Depths.

A landscape photo along the top of the sign shows a colorful view of Snow Canyon in spring. Low-growing woody sand sage bushes have pale green leaves and a sprawling Mojave prickly pear cactus is in full bloom. The flattened pear-shaped cacti are varying sizes the size of the palm of your hands and smaller. They grow clustered together in a mound. Hot pink flowers with rounded petals bloom from the tips of the tallest pear shapes. Next to the low mound of cacti is a half-circle tunnel into the side of a dirt ledge. A tortoise walks towards the arched opening of the tortoise den entrance. The arched opening is the right

shape and size for the tortoise with its domed shell to fit.

A highlight box reads: Tortoises create deep burrows which act as “timeshares” of the desert. A variety of desert dwellers will come and go at different times of the year to take advantage of tortoise hospitality.

Below the landscape image is an illustration of a tunnel winding deep into the ground. Images are placed along the tunnel to show examples of local wildlife that may be in a tortoise den.

The text reads: Don't Mind the House Guests!

The tortoise is a master engineer. Their burrows are essential for their survival, providing shelter from extreme summer and winter temperatures. Tortoise burrows are also important for wildlife biodiversity. Tortoise burrows may be a residence or temporary shelter for many other desert species, but not all will live there at the same time.

Images in the tunnel show a Western Banded Gecko, Great Basin Rattlesnake with the caption, A snake might slither in for a snack or to use as a winter den., Burrowing owls with the caption, When a tortoise abandons a burrow, kit foxes, burrowing owls, or other animals may move in., Images shown further

in the tunnel include a Gila monster, darkling beetle, desert cottontail rabbit, and then a Mojave desert tortoise at the deepest part of the tunnel. The last caption reads:

Underground burrows can be 3 to 6 feet deep and up to 30 feet long. Tortoises spend up to 95% of their time in burrows.

Photo credits read: Gecko, snake, owls, Gila monster, and desert cottontail photos courtesy of Rick Fridell. Tortoise photo (bottom) courtesy of Cameron Rognan.

Stop 3. Life on Their Own.

A photo of red rock desert mountains with a scattering of pale and dark green vegetation and a clear blue sky fills the background. A desert tortoise lies on a slope of red sand reaching its mouth towards a thin pale yellow invasive cheatgrass that dries out in summer as rapidly as it grows in spring which heightens wildfire danger across the region. The edges of his mouth are smudged with green as though he recently munched a lush green leaf. Photo courtesy of Cameron Rognan.

The text reads: Tortoises are on their own from “birth.” An adult female can lay up to three clutches of eggs in a season with each clutch containing an average of five eggs that are buried in spring and early summer and then abandoned. If the nest goes undetected by hungry predators such as Gila monsters or coyotes, the hatchling tortoises emerge three months later.

Exceptions to this life of solitude are uncommon, although tortoises have been known to share burrows. Otherwise, only the essential social interactions of mating season bring tortoises together. During this time they communicate with head

bobs, grunts, hisses, pops, and poink sounds.

A highlight box reads: Although desert tortoises spend the majority of their time in shelters, they may move up to a mile (1,600 m) per day. Their above-ground time is spent foraging, traveling between burrows, and occasionally mate-seeking.

Stop 4: How Do the Lucky Few Survive in the Desert?

A photo of a red rock mountainside with yellow blossomed brittlebush and purple flowered scorpion plants in crevices. In the shade of an overhanging rock, a desert tortoise can be seen sheltering from the sun. Photo courtesy of Cameron Rognan. Above the landscape photo is a black-and-white line drawing of a tortoise walking in mid-step. Text boxes describe the anatomy of a tortoise with lines leading to different areas of the illustration, as shown later in this description.

The main paragraph text at the top reads:

Much of the tortoise's water intake comes

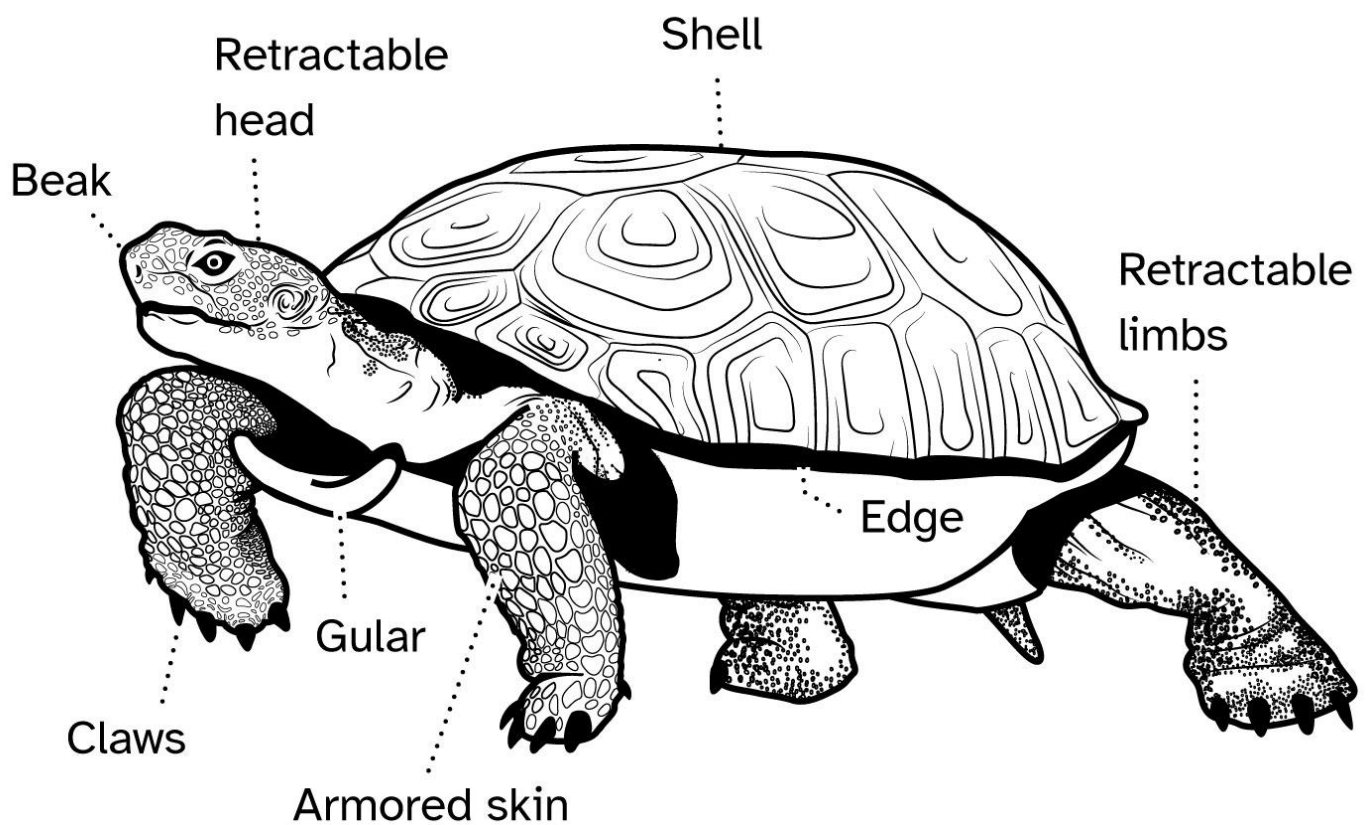
from their diet of wildflowers, grasses, herbs, and cacti. When water is available, the desert tortoise drinks excessively. Its large bladder can hold more than 40% of its body weight in liquid. During the summer and dry seasons, it uses this stored water to stay hydrated. Adult tortoises can survive a year without access to water.

When in danger, tortoises will retreat into their shell. Because shell hardness increases with body size and age, the best survival skill for young, soft-shelled tortoises is to hide.

This solitary creature can live from 50 to 80 years. It was listed as threatened under the Endangered Species Act in 1990.

Mojave desert tortoise illustration.

Pick up a raised line coloring page at the visitor center.



An adult desert tortoise can measure up to 14 inches (35.5cm) in length. Hatchlings are only 2 to 2 1/2 inches (5 to 6.5 cm) long.

The illustration labels read:

Shell: A thick shell helps to protect the tortoise from predators. The carapace (shell top) and plastron (shell bottom) are made from bone covered by hard plates of keratine, called scutes.

Edge: The edges of the shell help scrape away earth to burrow underground.

Gular: Longer in males than females. This horn [on the underside of the shell below the neck and head] aids males in flipping rivals when competing for mates.

Retractable head and limbs: The tortoise can pull its head, tail, and legs into its bony shell when threatened.

Beak: No teeth, just a sharp saw blade jaw for clipping off and grinding plants.

Claws: Strong, heavily scaled front legs equipped with sharp claws for digging burrows.

Armored skin: Hard, thick scales on legs for protection.

Bladder: Desert tortoises can recycle water stored in their bladder to stay hydrated.

Labels on the background photo read:

Shelter: To prevent water loss, tortoises move to sandstone dens or underground burrows as daytime temperatures rise. They can communally shelter over the winter months.

Temperature: Tortoises are cold-blooded. They regulate body temperature by moving in and out of sunlight and their shelter sites.

Stop 5: Protecting the Vulnerable.

A close-up image of a desert tortoise on a red rock mountainside under clear skies fills the sign. The tortoise appears to be looking out over the canyon. Barren red cliffs top the sparsely vegetated red sandy soil slope where he rests. The sign has two smaller captioned photos on the left and larger main text on the right.

One small image captures a desert tortoise crossing the Snow Canyon road. The tortoise is three-quarters across and still moving, but still in danger. He could be mistaken as a stone in the road or not seen at all by unwary drivers. A double yellow

line runs down the center of the road indicating that cars should not pass. A yellow diamond shape traffic sign indicates caution. It reads, "Share the Road" with an icon graphic of a car, a tortoise, and a bicyclist. On the same traffic sign posts is a second sign that reads Next 4 Miles. Further down the road is a post with a white Speed Limit 25 sign. Extending from the top of that posted speed limit is a black screen. When cars are driving over 25 miles per hour. The words slow down will flash on the sign.

A second small photo shows a wildfire-scorched landscape, black scorch marks dominate the flat valley. Unburnt dry

yellow grasses remain in patches in the foreground. An unburnt red mountain rises up behind the burned area and purplish, distant mountains rise higher further in the distance.

The caption reads: Fireworks set off a blaze that scorched miles of tortoise habitat. Any surviving tortoises must cope with a loss of vital shade and food. The landscape may take decades to recover.

The main text reads: Mojave Desert tortoises were listed as threatened under the Endangered Species Act in 1990. Loss of critical habitat, disease, and predators are just a few obstacles tortoises must

overcome. The journey is so difficult that only five in 100 hatchlings survive to adulthood.

Although tortoises can live up to 80 years, they do not reach reproductive maturity until 15 to 20 years of age. With so few hatchlings reaching adulthood, the loss of mature, healthy tortoises is tragic. The death of a breeding female is particularly impactful. In such a slow-growing, long-lived animal, a 20-year-old female could produce offspring for another 60 years. When adult tortoises die young, the entire population suffers and the impact is immediate.

Photo captions read: Tortoise photo courtesy of Cameron Rognan. Burned vegetation photo courtesy of John Kellam.

Stop 6: What Can You Do to Help?

A close-up photo of a newly hatched desert tortoise pulling at a piece of its eggshell. Photo courtesy of Cameron Rognan. A **caption reads:** Only 5 in 100 hatchlings make it to adulthood.

The main text reads: For many visitors, seeing a tortoise is a once-in-a-lifetime experience they will never forget. In a changing landscape where survival does not come easily, maybe there are lessons

the tortoise can teach us: survival, endurance, and resiliency. What does the desert tortoise mean to you? What would be lost if tortoises disappeared?

A bullet list header reads: Fortunately, there are things you can do to help protect tortoises and their homes.

- Remember to slow down and be observant while driving through the canyon.
- Stay on designated trails to preserve tortoise habitat, avoid collapsing burrows, and protect vegetation.
- Pack out garbage so predators are not drawn to trash in tortoise habitat.

- Do not pick up or handle tortoises which could cause them to lose their stored water and make them vulnerable to dehydration.
- Have campfires in designated areas only and extinguish them completely before you leave. Observe 'No fireworks' and other rules regarding combustibles.
- Volunteer for trail maintenance, weed removal, or other park projects to help preserve this special park and iconic species.

A captioned photo of a traffic sign is included.

A yellow diamond shape traffic sign indicates caution. The sign reads, "Share the Road" with an icon graphic of a car, a tortoise, and a bicyclist. On the same traffic sign posts a rectangular yellow sign reads Next 4 Miles.

The photo caption reads: When to move a tortoise. It is unlawful to harass or collect tortoises but if you see one crossing the road and can safely move it out of harm's way, please do so.

Final Stop: Benches and Tortoise Sculpture.

Touch the larger-than-life tortoise sculpture in the center of the clearing. Concrete benches around the clearing are shaped like flattened river rocks. A small sign on a post shows a picture of a baby Mojave desert tortoise crawling across reddish sand. It displays a quote that reads,

“The beauty and genius of a work of art may be reconceived, though its first material expression be destroyed; a vanished harmony may yet again inspire the composer; but when the last individual of a race of living things breathes no more,

another heaven and another earth must
pass before such a one can be again.”

—William Beebe, 1906

A photo credit reads: Photo courtesy of
Cameron Rognan.