

## Geology

The geologic history of the Tuweep area is similar to the rest of Grand Canyon, but includes a more recent chapter of volcanism. The Toroweap Fault underlies the valley, crosses the Colorado River, and continues south up Prospect Canyon. Volcanic activity began along this fault around seven million years ago. Over time lava issued from more than sixty vents. Beginning about 750,000 years ago, some flowed into Toroweap Valley, forming the flat-bottomed valley we see today. Vulcans Throne, Mount Trumbull, and the Uinkaret Mountains also formed through volcanic activity.

More than a dozen times, lava spilled over the canyon rim, damming the Colorado River. Remnants of these flows and dams are easily visible just west of the overlook. Sediments clinging to the canyon walls high above the river indicate the formation of large lakes. The river eroded the lava dams and continued its downward cutting. It is now 50 feet / 15 m deeper than the base of the dams. Despite its name, Lava Falls was formed from debris washed down Prospect Canyon, not from remains of the lava flows.

At less than one mile across the canyon to the Hualapai Indian Reservation on the South Rim, this is one of the narrowest and deepest segments of the inner canyon. The colorful redrock of the Hermit shale and Supai sandstones to the east contrasts with the black, basaltic lava flows to the west, making Toroweap Overlook a memorable, and often-photographed, viewpoint in Grand Canyon.

## National Park Service Regulations

Visitors are responsible for knowing and following all park regulations including:

- Collection or disturbance of natural and archeological resources is prohibited.
- Collection of any firewood is prohibited.
- Vehicles must stay on open roads and in parking areas—no cross-country travel. Signs, posts, or vegetation block CLOSED roads.
- ATVs, dirt bikes, UTVs MUST be highway/street legal.
- Camping permits are required except at Tuweep Campground.
- Food, scented items, and trash should be securely stored or locked in a vehicle when campsite is unattended.
- Campfires are prohibited except at Tuweep Campground.
- Pets must be restrained and are prohibited off the roads and within the inner canyon.
- All hunting is prohibited.

Walk on durable surfaces—established trails, routes, or slickrock—as the soil is a living biological crust. A single footprint damages the cryptobiotic crust for decades.

Please sign your name in the registers at Toroweap Overlook, Lava Falls Trailhead, and Tuweep Campground.

## Ecology

Tuweep sits at an elevation of 4600 feet / 1400 m on a landform known as the Esplanade, which forms a flat shelf situated about halfway between the coniferous forests of the North Rim and the hot canyon bottom. This high desert area has mild winters and light snows. Summers are hot with thunderstorms from July to September.

A chaparral community thrives in Toroweap Valley with juniper and pinyon, sagebrush and saltbush, Mormon tea and other woody shrubs, and various grasses. Nearer the Esplanade succulent cacti, yucca, and agave predominate. In years of abundant winter moisture, wildflowers may proliferate.

Some life forms, like the crusty black *cryptobiotic* soil, are rare and sensitive. This complex community of lichens, algae, and bacteria takes years to grow. Please avoid stepping on these fragile living organisms.

Wildlife includes mule deer, jackrabbits, rodents, and numerous species of birds and reptiles. Listen for the voice of the coyote in the night.

An often-overlooked and little-understood biotic community develops seasonally in the slickrock water pockets on the Esplanade. Fairy and horseshoe shrimp, tiny frogs, and microscopic organisms emerge from the muddy bottom when moisture fills these pools. The desert is truly a beautiful and amazing place to those who take the time to explore and study it.

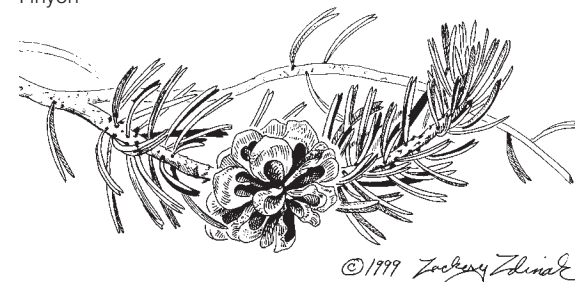
## History

The first humans in the Tuweep region were likely ice-age hunters who lived a nomadic hunting-gathering existence in what was a milder climate. The ancestral Puebloans farmed in this area, arriving about 2,000 years ago and migrating eastward around A.D. 1300. The most recent American Indian group to live here is the Paiute, who have a reservation to the north. Evidence of past human presence in this region includes dwellings, rock art, and numerous lithic and artifact sites.

John Wesley Powell visited Tuweep in 1870 while unsuccessfully searching for missing members of his 1869 river expedition. He mapped and named many of the local features. More recently, European-Americans ranched, mined, and settled in the area. While ranchers used this valley seasonally in the early 1900s, the first year-round homestead was the Lower Kent Ranch, built in 1927, located just north of the park. Other pioneers in the region include the Schmutz, Cunningham, Craig, and Bundy families. Henry Covington herded sheep and mined on the Esplanade off and on for more than twenty years. Many sites still exist that speak of his determination to live and prosper in this arid region.

In 1932 the Tuweep area was protected within Grand Canyon National Monument. Congress added the area to Grand Canyon National Park in 1975. Tuweep ranger John Riffey, one of the best known residents of the area, worked here for 38 years. His helpfulness, longevity, and airplane “Pogo” contributed to his legendary status. Today, the area is managed for preservation of the abundant natural and cultural resources and for the enjoyment of the few who venture to this remote corner of Grand Canyon.

Pinyon



For more Grand Canyon National Park information:

[www.nps.gov/grca/](http://www.nps.gov/grca/) or 1-928-638-7888

National Park Service  
U.S. Department of the Interior

Grand Canyon National Park  
Arizona



# Toroweap Tuweep



**The view from Toroweap Overlook,** 3,000 vertical feet (880 m) above the Colorado River, is breathtaking; the sheer drop, dramatic! The volcanic features, cinder cones and lava flows, which make this viewpoint unique within Grand Canyon National Park, are equally impressive. Lava Falls, the river's most challenging rapid, is just downstream, easily seen and heard from the overlook.

# Toroweap / Tuweep

*Toroweap*, a Paiute term meaning “dry or barren valley,” refers to many local features including the geologic formation and fault, the valley, and the overlook. *Tuweep* came into use to describe the local settlement and, later, the park ranger district. Tuweep refers to “the earth,” but this place name may be derived from a longer Paiute word meaning “long valley.”

## Getting There

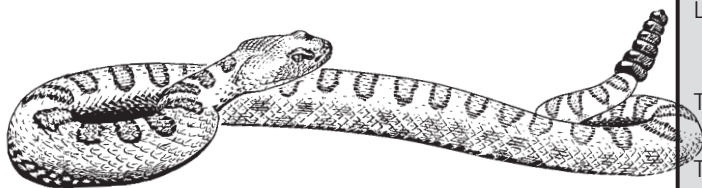
### Road Conditions

All routes are secondary county roads, graded occasionally, and generally in fair condition. The last three miles across the slickrock are the roughest, requiring a high clearance vehicle (*above right*). Allow two to three hours travel time from the highway to the overlook. RVs, trailers, or low-clearance vehicles are not recommended. All routes may be impassable after heavy rains and are subject to flash flooding. Twenty-five percent of visitors experience one or more flat tires. Dangerous curves are often unmarked, and posted mileages may be inaccurate. Since there are few, if any, year-round residents, assistance is not guaranteed on any route.

For these reasons, no one should attempt the trip without ample preparation and knowledge of the hazards associated with remote desert travel. Travelers should carry:

- Extra **WATER, FOOD, and GASOLINE**;
- **GOOD TIRES** including at least one usable spare;
- and **PARTS, TOOLS, and KNOWLEDGE** to handle vehicle and tire repairs including tire plugs and a portable air compressor.

A tow often costs \$1,000 – \$2,000.



Grand Canyon rattlesnake

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### Routes

Maps are available at the Bureau of Land Management office in St. George, Utah, at nearby Pipe Spring National Monument, and at the Kaibab National Forest office in Fredonia, Arizona.

The area can be reached from Arizona Highway 389 near Fredonia or Colorado City, Arizona, or from St. George, Utah.

**Sunshine Route** (BLM Road 109), the primary route, leaves Highway 389 about 8 miles / 12 km west of Fredonia (6 miles / 10 km east of Pipe Spring National Monument). It is 61 miles / 100 km long and is the most reliable route, but is subject to washboarding and dust.

**Clayhole Route** (BLM Road 5) leaves Highway 389 at Colorado City. It is also about 60 miles / 100 km long, but may be impassable when wet.

**Main Street Route** (BLM Roads 1069 and 5) from St. George, about 90 miles / 145 km each way, is the most scenic route. It may be impassable in winter due to snow on the slopes of Mt. Trumbull.

### Distances within Toroweap/Tuweep

Traveling south from the Tuweep Ranger Station to:

- Lava Falls Road Turnoff . . . . . 3.5 miles / 5.6 km  
To reach the Lava Falls Trailhead turn right at the “Y” and proceed to the end of the road.
- Tuckup Trailhead Road . . . . . 4.7 mi. / 7.6 km  
Turn left for the Tuckup Trailhead.
- Tuweep Campground . . . . . 5.4 mi. / 8.7 km
- Saddle Horse Canyon Trail . . . . . 5.7 mi. / 9.2 km  
Watch for trailhead on left.
- Toroweap Overlook . . . . . 6.3 mi. / 10.1 km

## Your Visit

Tuweep, accessible year-round, is managed for its undeveloped recreational experiences: solitude, natural history exploration, photography, camping, and hiking.

### Services

No gas, food, water, lodging, garbage collection, or other services are provided. A National Park Service ranger is stationed here year-round, but is not always available. NO telephone nor reliable cell coverage is available at Toroweap.

### Fees

The National Park Service charges no entrance fee for Tuweep, nor for the campground. A permit and fee are required for backcountry camping.

### Campground

Camping is allowed only in the campground within the Toroweap/Tuweep vicinity. Nine primitive sites (sites 1-9) for up to six people and two vehicles are available on a first-come, first-served basis. Camping is **FREE**; however, visitors are required to sign the register. Sites may fill during spring months and during holidays and weekends. Picnic tables, fire grates, and composting toilets are provided. Bring your own water and firewood.

One group site (Site 10) for 7–11 people and up to four vehicles is available via reservation only up until noon the day it is needed. The group site may be reserved, free of charge, up to four months in advance by e-mailing [grca\\_bic@nps.gov](mailto:grca_bic@nps.gov).

Ravens, mice, skunks, and ringtails are common. Always store your food, scented items, and trash securely or in your vehicle when leaving your campsite unattended.

### Backcountry Camping

Permits are required for backcountry camping and can be obtained at Pipe Spring National Monument or by calling the Backcountry Information Center at (928) 638-7875, between 1:00 and 5:00 p.m., Monday through Friday. Online reservations are not available, but you may e-mail [grca\\_bic@nps.gov](mailto:grca_bic@nps.gov) for further information. Backcountry camping is zone-based in the Tuweep Sub-district, which stretches from Kanab Creek to the Grand Wash Cliffs within Grand Canyon National Park.

### Airstrip

Arizona has closed the Tuweep airstrip.

## Trails

The four hiking routes in the Toroweap area require navigational ability as they are sparsely marked with cairns. Self-rescue is the only dependable option available in the event of an injury or illness. Shade and water are scarce; heat exhaustion is common.

The **Esplanade Loop Trail** starts from Tuweep Campground Site 10. This easy walk of 2.9 miles / 4.7 km (1-2 hours) requires some navigational skill; watch for the cairns. Follow the two-track road (closed to vehicles and bicycles) to the old Tuckup Road 5.4 miles / 8.7 km south of the Tuweep Ranger Station. Upon reaching the Tuckup Road, turn left (west) and walk until you reach the Tuckup Trailhead. At the trailhead follow the main road south to the Tuweep Campground completing your loop.

The **Saddle Horse Canyon Trail** is an 1.6 mile / 2.6 km, round trip hike (1 hour). The trail starts 0.3 mile / 0.5 km south of the Tuweep Campground (5.7 miles / 9.2 km south of the Tuweep Ranger Station). This easy walk requires some route finding (follow the cairns) and brings you to the rim of Saddle Horse Canyon.

The **Tuckup Trail** begins on the Tuckup Road, 4.7 miles / 7.6 km south of the Tuweep Ranger Station. Use the parking area 0.1 mile / 0.2 km after the left turn onto the Tuckup Road. The trail is difficult to follow, requiring route-finding skills. Hikers use this trail for either a multi-day hike (permit required) or as an out and back hike. Bring adequate water on this sun-exposed trail.

The **Lava Falls Route** (definitely not a trail, *see photo*) starts at the end of the Lava Falls Road (turn



west 3.5 miles / 5.6 km south of the Tuweep Ranger Station). The 1.5 mile / 2.4 km route is extremely exposed and crosses steep, treacherous talus slopes on its 2,500 foot / 760 m plummet to the Colorado River at Lava Falls Rapid. The route, marked in only a few locations, descends one of the hottest, steepest, loosest, scariest chutes in the canyon. This route is life-threatening in the summer due to the extreme heat and lack of water.