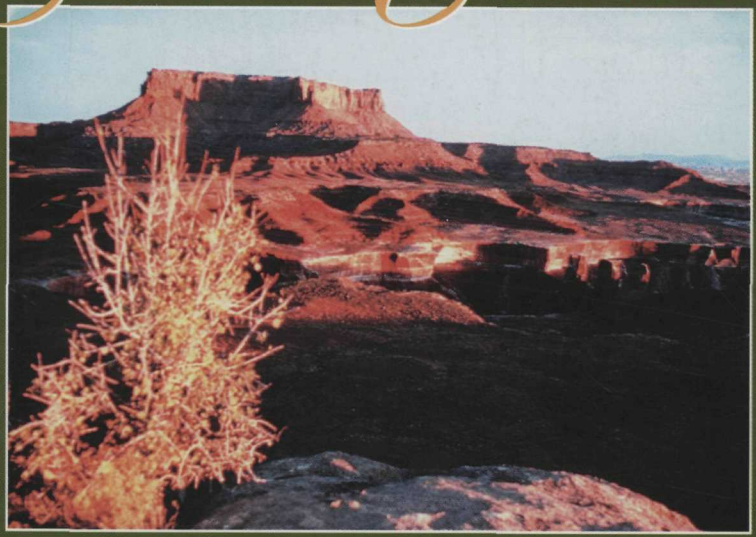
Canyon Country



A Geologic Guide to the Canyonlands Travel Region

Canyon Country

A Land Of Enchantment

This vast rock desert in southeastern Utah showcases deep, colorful canyons, majestic natural monuments pictured in western movies, a fantasy land of towering pinnacles and slot canyons, rock arches and bridges, and breathtaking vistas atop mesas. Much can be seen by car, and more of this endlessly intriguing country is accessible by foot, mountain bike, four-wheel-drive vehicle, or watercraft.

You do not have to be a geologist to enjoy or interpret the scenery, for the rocks easily divulge their stories of forming in seas or on land, in deserts or in deltas, in rivers or along beaches. What a fascinating heritage: dinosaurs once sauntered through lush lowlands leaving huge footprints in mud that has now turned to rock, vast sand dunes that drifted across the area are preserved as large sweeping lines in sandstone walls, and oceans that once covered this region left fossilized corals and seashells embedded in limestone.

This guide introduces you to the rocks' stories, to enhance your travels and your appreciation of the region. Along designated scenic byways, which are portrayed at the end of this pamphlet, look for the specific features described here and learn what their journey has been as you make yours. During your visit, tread lightly on this delicate land so that the pristine and unique landscape remains unchanged. Desert soils are extremely fragile; minimize your impact by staying on roads or marked trails.

Above photo and cover photo courtesy of the Grand County Travel Council.

Credits

Text by Sandra N. Eldredge. Photos by author unless otherwise credited. Graphics by Vicky Clarke. Special thanks to: the Salt Lake Convention & Visitors Bureau and the Utah Travel Regions Association for their support of this project; Canyonlands National Park and the Grand County Travel Council for photo releases; Newc and Sally Eldredge for field assistance; Miriam Bugden, Joan DeGiorgio, Hellmut Doelling, Kimm Harty, Carolyn Olsen, Michael Ross, and Christine Wilkerson for providing valuable reviews; and Patti MaGann who helped to get this project off the ground.

Time Passages

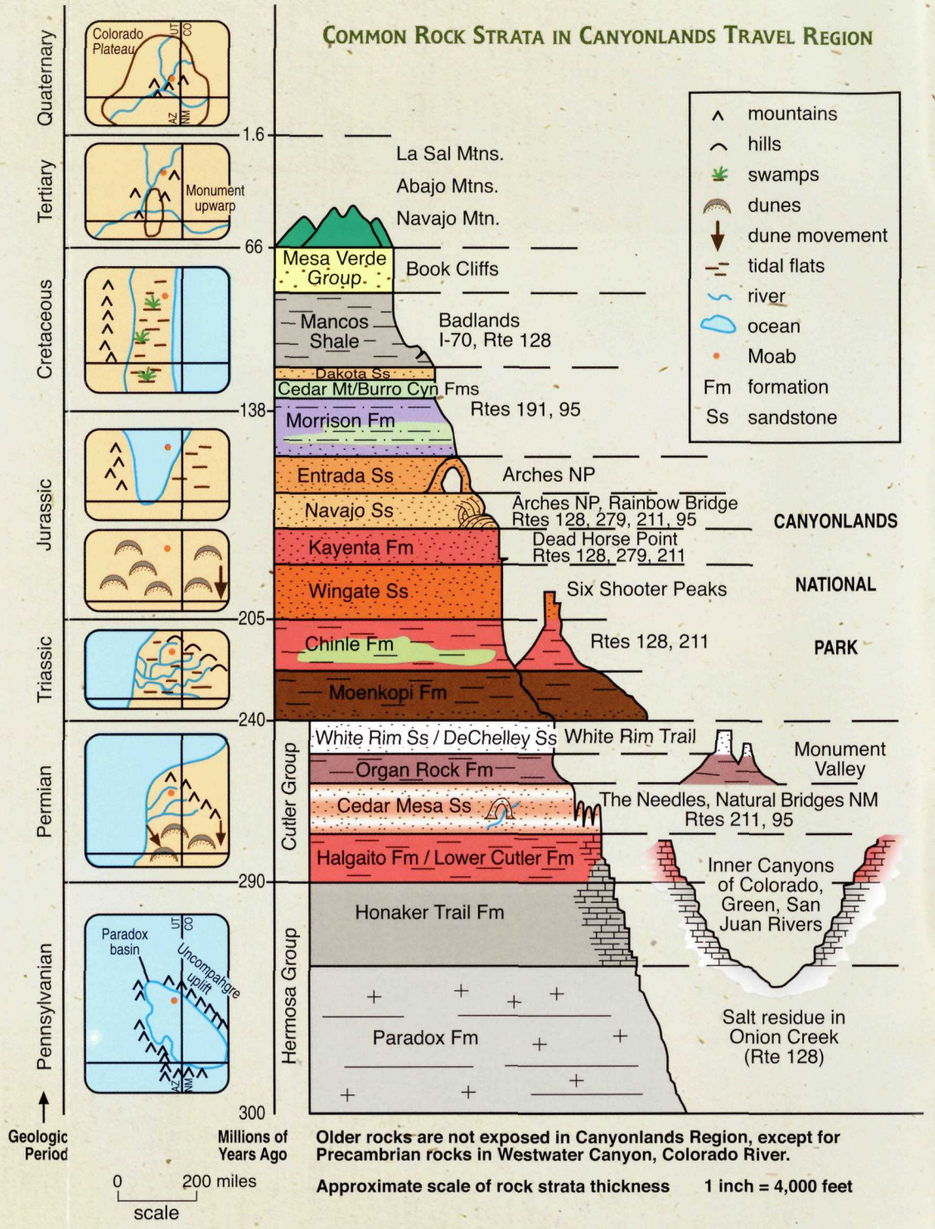
At many vistas in the Canyonlands region, the rocks display hundreds of millions of years of earth history. And yet, what you see are only small slices of earth's time, during which oceans repeatedly flooded and retreated, mountains rose and wore down, river systems appeared and disappeared, and sand dunes migrated across a Sahara-like desert.

Much of the landscape's uniqueness is due to underground salt movement. Salt collected in a restricted arm of an ocean 300 million years ago during the **Pennsylvanian** Period. At that time, the nearly flat landscape buckled into a mountain range (Uncompahgre uplift) and an adjacent basin (Paradox basin). The basin was intermittently connected to, and then isolated from, a nearby sea. During the isolation phases, salt water evaporated, eventually leaving vast salt deposits up to thousands of feet thick over most of what is now the Canyonlands region. These salts became the rock strata called the Paradox Formation.

The colorful rocks that are the essence of this canyon country were laid down as sediments, layer upon layer, over the salt during the next 150 million years in the Permian, Triassic, and Jurassic Periods. Early in **Permian** time, the sea started to recede to the west, leaving a coastal plain over the Canyonlands area. Rivers flowed from the Uncompahgre highlands over this coastal plain to the sea. Red sediments carried by the rivers accumulated in channels and flood plains. Concurrently, white beach sands deposited by the ocean blew eastward and formed inland sand dunes. Fluctuating sea levels and intermittent river activity across the region resulted in the interfingering of these red and white sediments, which hardened into rocks called the Cutler Group.

As the Uncompahgre mountains slowly eroded to low hills during the **Triassic**, the adjacent (southwestern) area evolved into tidal flats and a large river delta. Brown and red clay, silts, sands, and pebbles transported from the eroding mountains became the slope-forming rock strata known as the Moenkopi and Chinle Formations.

Drier climate during early **Jurassic** time transformed the region into a vast sandy desert; the wind-blown sands eventually hardened into rocks that now are the red and gold sandstone cliffs and sky-



line domes of the Wingate and Navajo Sandstones. Rivers intermittently appeared, as evident from the river-deposited Kayenta Formation which separates the wind-deposited Wingate and Navajo Sandstones. Interestingly, the water sources that existed during this time, such as the river systems of the Kayenta and oases of the Navajo, provided thriving habitat for many dinosaurs.

During middle-Jurassic time, the desert was slowly covered by an arm of a sea that entered from the north, and sands deposited in tidal flats, lagoons, and as coastal dunes became the Entrada Sandstone (renowned for arch development in Arches National Park). At the end of the Jurassic, rivers and lakes collected silts and sands that formed the Morrison Formation. Dinosaurs caught in recurrent floods were quickly buried by river sediments, turning the Morrison into a remarkable dinosaur graveyard.

The last sea to invade the area approached and retreated from the east during the **Cretaceous**. Gray muds (now the Mancos Shale) that collected on the quiet ocean floor, and the shoreline sands and coal-forming swamps (now the Mesa Verde Group), are visible in the northern part of the region in the Book Cliffs.

A gentle, broad uplifting in the southern part of the Canyonlands region, the Monument upwarp, formed during the **Tertiary**. Also during this time, the birthplaces of the La Sal, Abajo, and Navajo Mountains were established where hot magma rose close to the earth's surface (see description in Mountains section).

The present stage of geologic history began about 15 million years ago, when the Colorado Plateau, which encompasses the Canyonlands area, was uplifted and the forces of water and wind erosion began their work. The Colorado, Green, and San Juan Rivers and their tributaries continue to cut downward though the rock layers and carry enormous amounts of sediment off the plateau; mesas, buttes, and monuments continue to get smaller; and arches, spires, and hoodoos continue to form. The dramatically sculpted landscape of today's canyon country is constantly, but ever-so-slowly, changing.

The Rivers and Canyons

Countless, magnificent canyons carve the land and are grand testimony to "Canyonlands." Many deep gorges wind back on themselves like ribbon candy; these ***entrenched meanders*** (river bends cut deeply into rock strata) established their wandering courses across flat plains before the Colorado Plateau uplift began. When the land rose, the rivers maintained their meandering paths and began to slowly cut downward through the rock layers. Entrenched meanders can be seen from overlooks in Canyonlands National Park, Natural Bridges National Monument, and Goosenecks of the San Juan State Park.

The Colorado, Green, and San Juan Rivers offer both flat- and white-water trips through spectacular canyons. All three rivers can be floated via commercial trips, or private trips with permits.

The famous Goosenecks of the San Juan River form three tight loops that are 1.5 miles long. Staircase walls are patterned by ***differential erosion***–hard rocks that are not easily eroded form ledges and easily eroded soft rocks form slopes.

Red Rocks and Desert Varnish

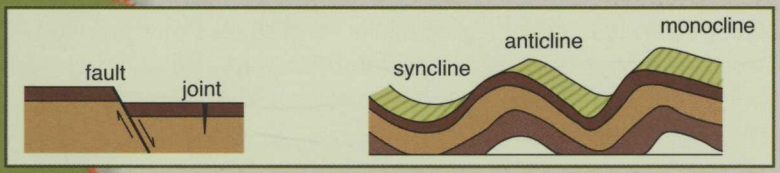
Red or rusty-hued rocks were deposited in oxygen-rich environments. Many sediments contain iron compounds, and the combination of iron and oxygen commonly produces red colors. Thus, the abundance of red rocks in the Canyonlands area, also called "red rock country," reveals they formed in oxygenated environments (for example, in rivers or deserts, but not in stagnant, oxygen-poor lagoons).

Black stains resembling spilled paint form streaks on many cliff walls. This staining, called ***desert varnish***, forms where water rich in iron and manganese oxides evaporates, leaving a thin, black veneer of minerals on the rock face.

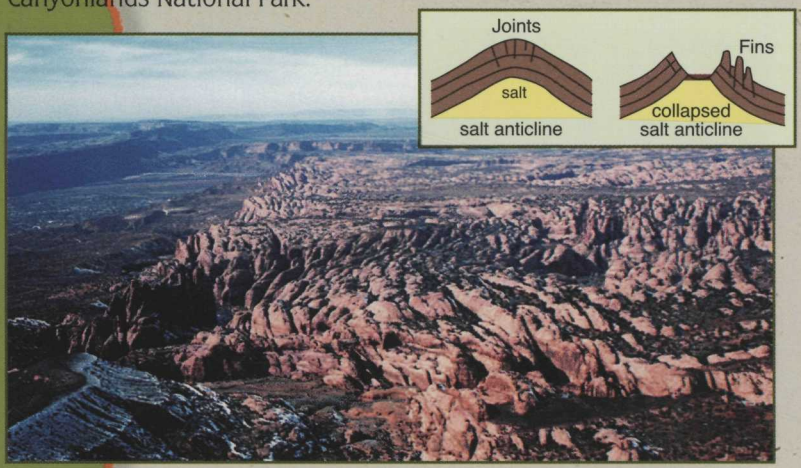
Desert varnish streaks White Rim Sandstone walls. Red rocks in the distance are slopes of the Chinle and Moenkopi Formations overlain by cliffs of Wingate and Kayenta. A dome of Navajo Sandstone caps the cliffs.

Folds, Faults, and Joints

When the earth's crust buckles, it can either bend or break. Bending of rock layers is called ***folding***: ***anticlines*** are upfolds, ***synclines*** are downfolds, and ***monoclines*** have one side tilted higher than the other. Breaking of rock layers produces fractures called faults or joints. A ***fault*** is a break in the rock along which there has been noticeable movement between the two sides. A ***joint*** is a linear, open crack in the rock.



Several bending and breaking features superbly exhibited in the bare rock of the desert include: the Moab fault near Arches National Park visitors center, the Cane Creek anticline southwest of Moab, the Comb monocline in the southern part of the region, and the many enlarged joints that form intriguing slot canyons in and around Arches National Park and The Needles District of Canyonlands National Park.



Moab Valley, view to north. Upward doming of rock layers over the Moab Valley salt anticline (left) initiated the joint and fin development on the anticline's east flank. The anticline crest collapsed hundreds of feet as the underlying salt dissolved. Eventually the collapsed rocks eroded and now a valley remains.
Photo courtesy Grant Willis.

Salt Movement

Salt movement beneath the Canyonlands region contributed to the creation of many features peculiar to the region, including collapsed anticlines, grabens, fins, and arches. The weight of overlying rock layers squeezed the salt into areas of lower pressure, which were linear belts along deep buried faults. In these areas, the salt thickened and formed linear salt tracts. Later, horizontal compression in the earth's crust bulged the salt belts and overlying rocks upward to form anticlines. The brittle, overlying rocks broke along faults and joints in and parallel to the anticlines' crests, which enabled water to reach the underlying salt in some anticlines. As the salt dissolved, the overlying rock layers collapsed hundreds of feet (called ***collapsed salt anticlines***), leaving valleys such as Salt Valley in Arches National Park and Moab Valley. Other anticlines, such as the Cane Creek anticline, have not collapsed.

Cyclone Canyon is in The Grabens, which is part of The Needles District of Canyonlands National Park. Rock layers two thousand feet thick in The Grabens are imperceptibly gliding over salt beds that are also slowly moving downslope toward the Colorado River canyon. As the rock layers move toward the river, they break apart, forming faulted, wide, straight-sided, and flat-bottomed canyons (***grabens***). South view toward The Needles jutting into the distant skyline. *Photo courtesy Canyonlands National Park.*

Arches

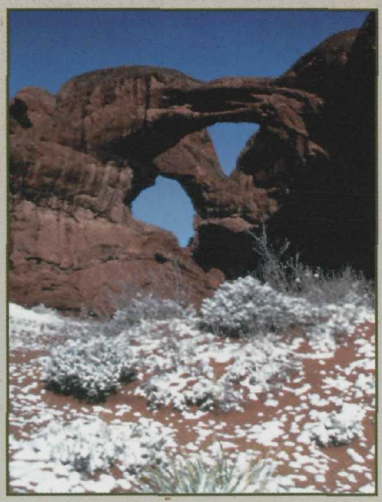
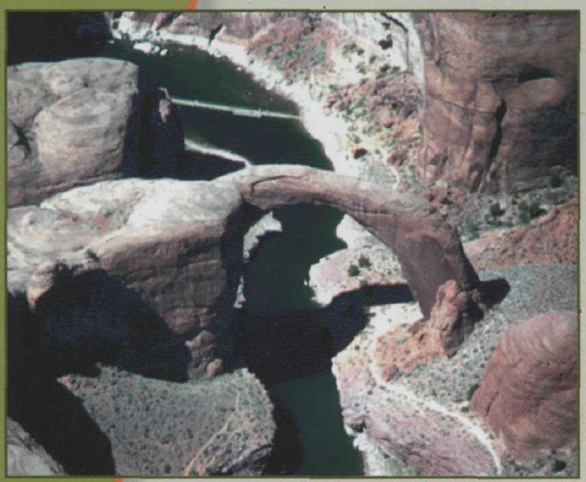


Photo courtesy of Utah Travel Council.

Arches are found throughout canyon country, and Arches National Park has the greatest concentration of them in the world (over 1,500). Underground salt movement, erosion of sandstone by wind and water (the Entrada Sandstone in Arches National Park is particularly susceptible to arch development), and temperature variations contribute to the development of arches. The process starts where joints develop in the sandstone overlying a salt upwarp. The joints widen as ice expands in the cracks, and rain and snowmelt dissolve the calcium carbonate that holds the sand grains together. Continued erosion creates greatly enlarged joints that separate towering sandstone walls, called "fins." Alcoves in the fins evolve as thin, curving sheets of rock fall away. Alcoves may develop on both sides of a fin and eventually join to create an arch.

Bridges

Unlike arches, natural bridges initially form by stream erosion (see Scenic Byway 95 for description). Natural Bridges National Monument contains three of the largest rock bridges in the world, and Rainbow Bridge National Monument encompasses the largest known natural bridge at 290 feet high and spanning 270 feet.



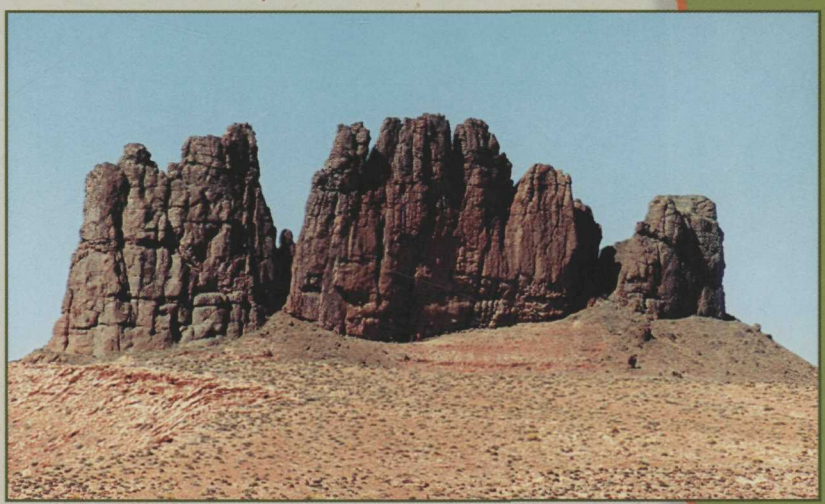
Rainbow Bridge (on Lake Powell) is carved from the Navajo Sandstone. *Photo courtesy Utah Travel Council.*

Mountains

During the Tertiary Period, the La Sal, Abajo, and Navajo Mountains, as well as the Henry Mountains to the west of the region, were created. Molten rock (magma) beneath the earth's surface pushed upward through the rock layers in these areas. The magma, which did not reach the surface, slowly cooled and hardened into granitic rocks. Covering and surrounding these hard rocks were soft sedimentary rocks that eventually eroded, leaving the rugged granitic protrusions to loom over the region. Navajo Mountain still maintains its cap of sedimentary rocks. As recently as 10,000 years ago, glaciers carved the higher peaks in the La Sal Mountains, the second highest mountain range in the state.

Diatremes

Explosive Tertiary volcanic events created ***diatremes***, which are volcanic necks or plugs. Small vents erupted pulverized rock and gas from the magma chamber to the earth's surface. The magma-filled vents cooled and hardened, and were covered by sediments that later eroded. The remaining volcanic necks now stand in stark outline above the surrounding landscape. Diatremes are present in the southern part of the region along Comb Ridge. They are also in adjacent states, and include the famous Shiprock in northwestern New Mexico.



Alhambra Rock is a diatreme seen along Scenic Byway 163.

Colorado River Scenic Byway 128

44 miles, 1 hour

Potash Scenic Byway 279

17 miles, 1 hour for 34-mile round trip

NORTH — M = milepost

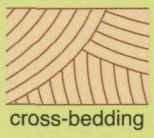
anticline, rock strata tilt upward toward axis

syncline, rock strata tilt downward toward axis

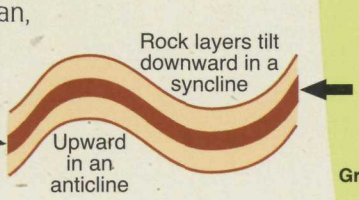
collapsed salt anticline

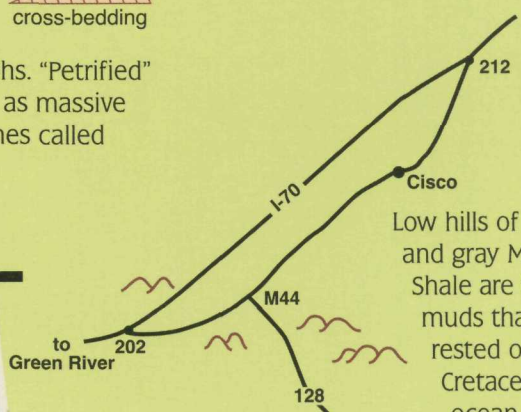
Ancient sandy beaches and muddy floors of the Cretaceous ocean are now preserved in the cliffs and incised slopes of the Book Cliffs.

Red and gold sandstone walls tower above the Colorado River and emphasize the glowing sunsets, green hanging gardens, and petroglyphs. "Petrified" sand dunes of ancient Jurassic deserts are now seen on the skyline as massive rock domes, and on cliff walls as long, sweeping and intercepting lines called cross-bedding. Other features provide clues to the existence of the Cretaceous ocean, Triassic river deltas, and Permian river systems bordering a western sea. Along the road, rock layers tilt up and down in anticlines and synclines produced by underground salt movement.



cross-bedding





Low hills of brown and gray Mancos Shale are former muds that rested on the Cretaceous ocean floor.

Red and green slopes below the Wingate cliffs are the Chinle Formation deposited by meandering streams. The chocolate-brown Moenkopi Formation, deposited in tidal flats, forms the lower part of the slope. In some locales, the basal Chinle contains a thin, white layer of "gritstone," which helps define the boundary between the Chinle and underlying Moenkopi.

Green and purple siltstone and sandstone are the Cedar Mountain and Morrison Formations deposited by rivers and lakes.

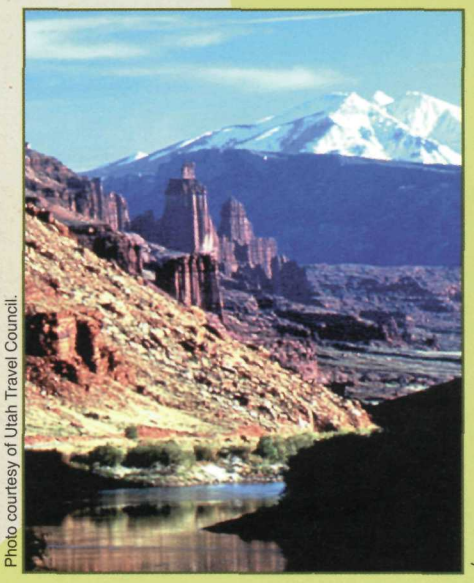


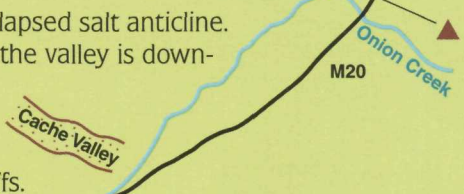
Photo courtesy of Utah Travel Council.

Base of the Entrada Sandstone is exposed at river level (dips down to the north).

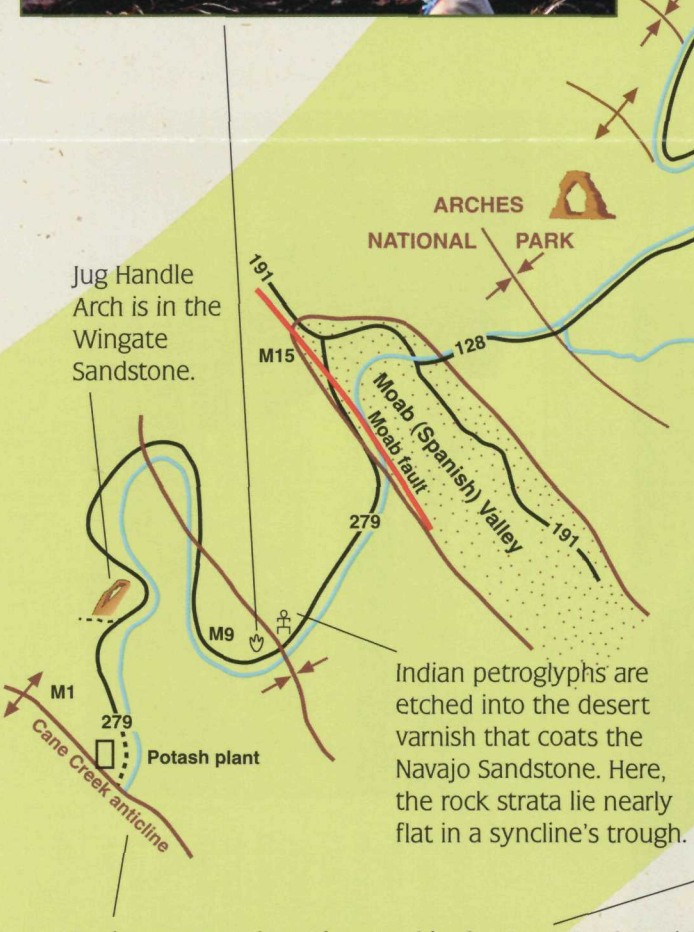
Dinosaur tracks are preserved in a limestone layer within the Kayenta Formation, which is exposed on the flank of a syncline. Forty feet above the road, near the 200-million-year-old tracks, scattered rounded cobbles mark a level of the Colorado River that is 40,000 years old.

Fisher Towers are columns of red Cutler rocks.

Cache Valley is a collapsed salt anticline. The large mound in the valley is downdropped Wingate Sandstone; look for matching Wingate high on adjacent cliffs.



Priest and Nuns and Castle Rock are erosional remnants of a once larger mesa of Wingate Sandstone.



Jug Handle Arch is in the Wingate Sandstone.

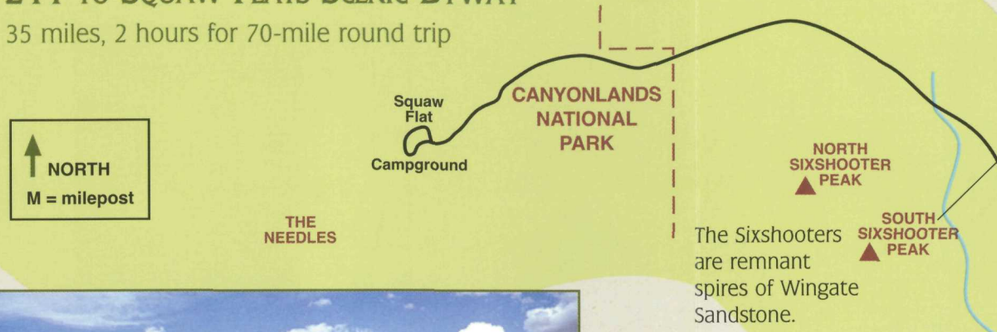
Indian petroglyphs are etched into the desert varnish that coats the Navajo Sandstone. Here, the rock strata lie nearly flat in a syncline's trough.

Rock strata are domed upward in the Cane Creek anticline, a salt anticline that has not collapsed. Cutler rocks are at river level, and Moenkopi and Chinle slopes capped by Wingate cliffs rise above a potash plant (left of river). Potash is mined from the Paradox Formation, which is close to the surface in the domed structure of the anticline. Here, the potash is 3,000 feet deep, whereas potash and other salts in the Paradox basin are typically more than 4,000 feet deep.

U-211 to Squaw Flats Scenic Byway

35 miles, 2 hours for 70-mile round trip

Beginning at Church Rock, this road crosses the sage flats, winds down to cottonwood-lined Indian Creek canyon, passes intriguing Newspaper Rock, enters a wide valley bounded by Jurassic-age sandstone walls and Triassic-age siltstone slopes, and ends at Squaw Flat Campground in The Needles District of Canyonlands National Park. Dominating the landscape upon entering the park is the Cedar Mesa Sandstone - formerly a Permian coastal area of beaches and inland sand dunes, located between the northeastern river networks and western ocean. Views of the Abajo Mountains, the skyline spires of The Needles, petroglyphs, and rock climbers scaling Wingate Sandstone cliffs add diversity to this drive.

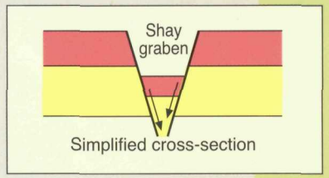


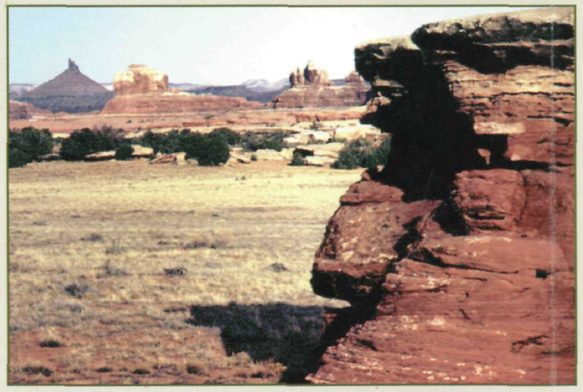
The Sixshooters are remnant spires of Wingate Sandstone.

The area behind South Sixshooter Peak was considered for the nation's first high-level nuclear-waste repository. Salt beds 3,000 feet below the surface were targeted as potential host rocks for the radioactive material.

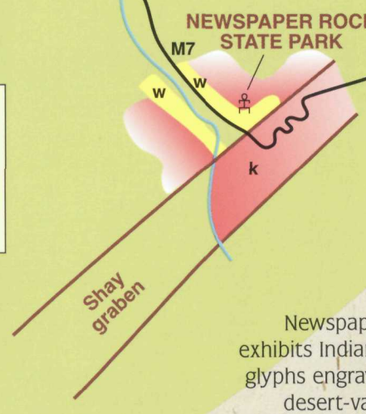
Red and white colors within the Cedar Mesa Sandstone are reminders of the ancient Permian coast, where white sands from the coastal and inland dunes and red sands from rivers mingled over millions of years. The red and white bands are particularly evident in The Needles. *Photo courtesy Canyonlands National Park.*

Shay graben is a downdropped block between two faults. Descending into Indian Creek canyon, the normal progression from younger to older rocks is disrupted. The disorder is most evident on the northwestern fault adjacent to the road, where the red Kayenta Formation is downdropped to the same level as the yellow Wingate Sandstone. Normally the younger Kayenta overlies the older Wingate.

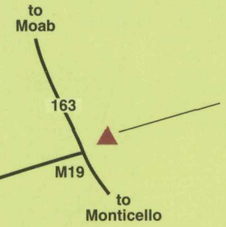




Cross-bedded Cedar Mesa Sandstone (right foreground) in Squaw Flats Campground. East view to South Sixshooter Peak (distant left). *Photo courtesy Canyonlands National Park.*



Newspaper Rock exhibits Indian petroglyphs engraved into desert-varnished Wingate Sandstone.

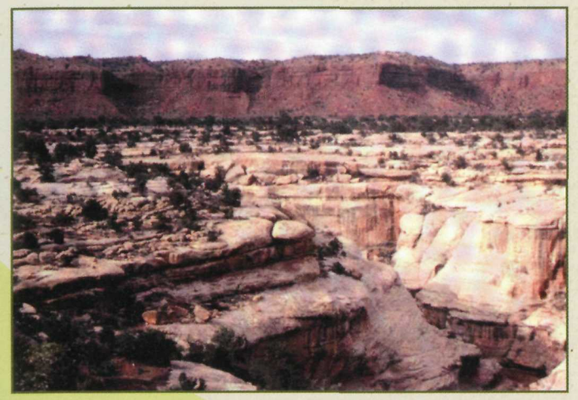


Church Rock stands like a sentinel on the sage flats. The rock displays the three members of the Entrada Sandstone: the basal red Dewey Bridge, the middle yellow Slick Rock, and the upper light-tan Moab Tongue.

Bicentennial Scenic Byway 95

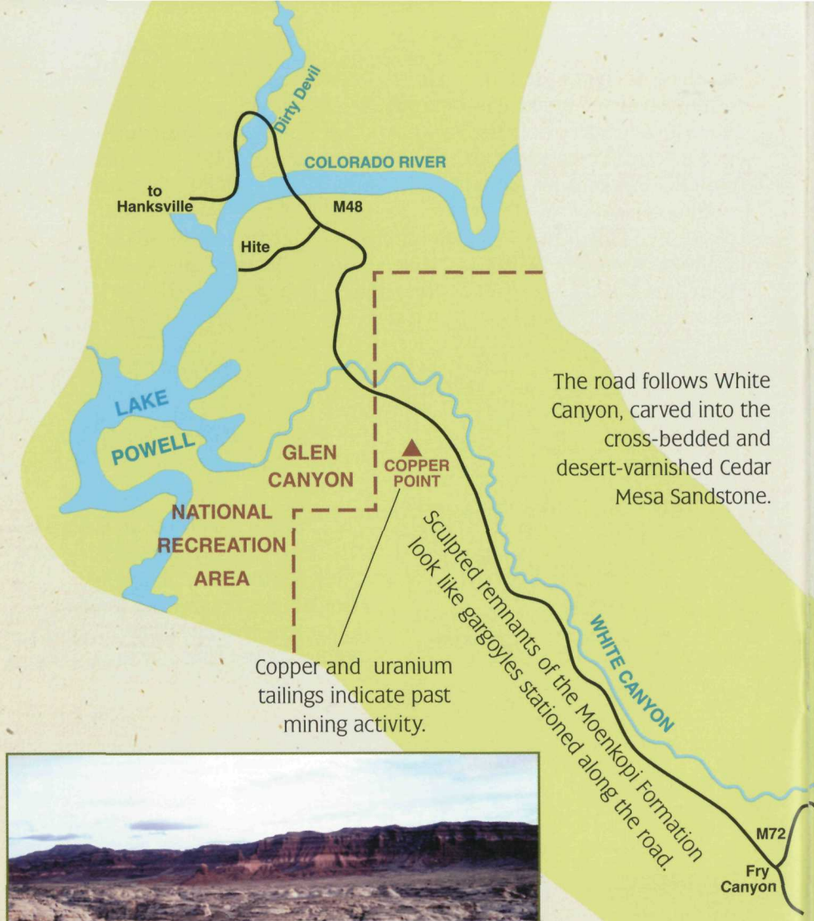
73 miles, 2 hours between Blanding and Hite
(route continues northwest to Hanksville)

Sand dunes drifted across the area between the present-day Comb Ridge and Colorado River 260 million years ago. Now frozen in time, they are preserved as the white rock called the Cedar Mesa Sandstone on the 7,000-foot-high Cedar Mesa. The sand dunes gave way to a landscape of flood plains when a western sea retreated to the west. Rivers flowing from the northeast deposited red silts on the flood plains; the silt hardened into the Organ Rock Formation. The sea then advanced as far east as the present Colorado River, depositing beach sands along its shore. White beaches and eastward-migrating dunes became the White Rim Sandstone. Riveting color contrasts of red rocks, white rocks, and green junipers and pinyon pines, as well as panoramic views for one hundred miles are eye-catching along this route, which includes side trips to Natural Bridges National Monument and Indian ruins.



Comb Ridge, a classic example of a monocline, forms the abrupt eastern flank of the Monument upwarp, and extends north-south for 70 miles. The road cuts through steeply tilted Navajo, Kayenta, Wingate, and Chinle strata (rocks dip down toward the east, to photo left). Comb Wash follows the easily eroded Moenkopi and Organ Rock Formations. The light-colored Cedar Mesa Sandstone is in the foreground.

Hite is the entrance to dam-impounded Lake Powell on the Colorado River. Light-colored sandstone with the frozen-dune appearance is the Cedar Mesa Sandstone. Overlying red slopes and ledges (background) are the Organ Rock Formation, which contains a pink band of sandstone. The thin, white ledge capping the red slopes is the White Rim Sandstone, which noticeably thickens to the west. The Moenkopi Formation defines the skyline.



The road follows White Canyon, carved into the cross-bedded and desert-varnished Cedar Mesa Sandstone.

Copper and uranium tailings indicate past mining activity.

Sculpted remnants of the Moenkopi Formation look like gargoyles stationed along the road.

The Organ Rock Formation forms the base of the aptly named Cheesebox, composed of the Moenkopi Formation.

An eight-mile-long loop road overlooks three large natural bridges. The bridges formed as rivers eroded through thin walls of Cedar Mesa Sandstone that once separated the bends of entrenched meanders. The rivers abandoned the meanders to take the shorter paths under the bridges.

Two red buttes in the Wingate Sandstone and Chinle Formation top Cedar Mesa.

The road ascends the gently tilted rock strata toward the crest of Monument upwarp.

Red, green, and purple siltstone and claystone of the Morrison Formation color the washes.

US-163 from the Arizona border to Bluff Scenic Byway

45 miles, 1½ hours

Travel across a 300-million-year-old ocean shelf complete with coral reefs and abundant marine life. This shelf formed the southeast margin of the Paradox basin. Much of the road traverses the Honaker Trail Formation, a gray limestone (weathered to a tan color under Mexican Hat Bridge) encapsulating fossils from the ancient ocean. Anticlines and synclines superimposed on the Monument upwarp were formed by compression of the earth's crust. This route passes through an enchanting landscape of monuments and spires and includes side trips to the Valley of the Gods and to impressive vistas via the Moki Dugway road. Half of the scenic byway is on the Navajo Indian Reservation.

Monument Valley Navajo Tribal Park is a landscape of fantastic mesas, buttes, and spires sculpted in the DeChelly Sandstone underlain by the red slopes of the Organ Rock Formation. The DeChelly originated as desert sand dunes from Permian time. The dunes were bordered on the northwest (approximate present location of the Colorado River) by the White Rim sand dunes and beaches along the fringes of a western ocean, and on the north (approximate present location of the San Juan River) by Cutler Group rivers.

to Natural Bridges National Monument

CEDAR MESA

Moki Dugway road (Rte 261) rises in a series of switchbacks to the top of Cedar Mesa and offers fabulous views into the Valley of the Gods, the canyons of the San Juan River, and Monument Valley.

VALLEY OF THE GODS

The road is on the Honaker Trail Formation, and gently climbs to the crest of Lime Ridge anticline.

A 17-mile-long loop road passes captivating monoliths of the Cedar Mesa Sandstone.

261

M29

A four-mile drive from the Moki Dugway road leads to an overlook of classic entrenched meanders that have cut down 1,000 feet through Pennsylvanian-age limestones.

GOOSENECKS OF THE SAN JUAN STATE PARK

MEXICAN HAT ROCK

Mexican Hat

M20

Raplee anticline

Lime Ridge anticline

COMB RIDGE

(see Rte 95 for description)

San Juan River

to Blanding

191

NAVAJO TWINS

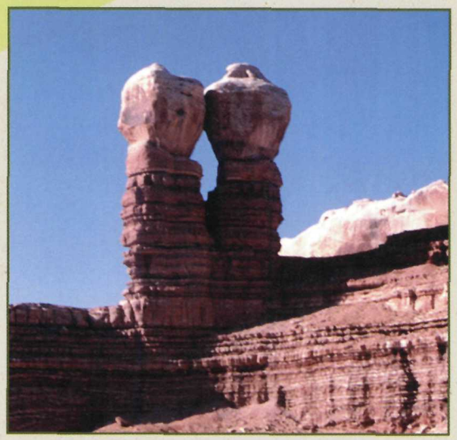
M45

Bluff

163

191

The local, wind-deposited Bluff Sandstone (a member of the Jurassic-age Morrison Formation) is named after this town.



The Navajo Twins are caps of Bluff Sandstone.

ALHAMBRA ROCK

Ancient eruptions exploded from this volcanic neck.

MONUMENT UPWARP AXIS

MONUMENT PASS

M6

163

UT

AZ

M1

MONUMENT VALLEY NAVAJO TRIBAL PARK

The famous sombrero-shaped Mexican Hat Rock is a precariously perched resistant unit in the Halgaito Formation. The Halgaito and Honaker Trail Formations appear as red and greenish-gray ribbons on the western flank of the Raplee anticline (background). Farther south on this route, the rock ribbons take on a scalloped appearance that is due to differential erosion of the soft and hard rocks; the softer Halgaito is wearing away from the crest of the anticline.

M = milepost

unpaved road

NORTH

anticline, rock strata tilt upward toward axis

syncline, rock strata tilt downward toward axis

monocline, rock strata dip down in one direction away from axis

Information Agencies

Salt Lake Convention & Visitors Bureau
180 South West Temple
Salt Lake City UT 84101 (801-521-2822)

Utah Travel Council
Council Hall, Capitol Hill
Salt Lake City UT 84114 (801-538-1030)

Moab Information Center
Center St. and Main St., Moab UT 84532
(Staffed by Utah Travel Council, Canyonlands Natural History Association (801-259-6003), Bureau of Land Management (801-259-8193), National Park Service, and U.S. Forest Service)

Arches National Park
P.O. Box 907, Moab UT 84532 (801-259-8161)

Canyonlands National Park
125 West 200 South, Moab UT 84532 (801-259-7164)

Grand County Travel Council
210 North 100 West, Moab UT 84532 (1-800-635-6622)

Dead Horse Point State Park
P.O. Box 609, Moab UT 84532 (801-259-6511)

San Juan County Travel Council
117 South Main St.
Monticello, UT 84535 (801-587-3235)

Edge of the Cedars State Park
P.O. Box 788
Blanding, UT 84511 (801-678-2238)

Monument Valley Navajo Tribal Park
P.O. Box 360289 (801-727-3287/3353)
Monument Valley, UT 84536

Natural Bridges National Monument
Box 1, Lake Powell, UT 84533 (801-259-5174)

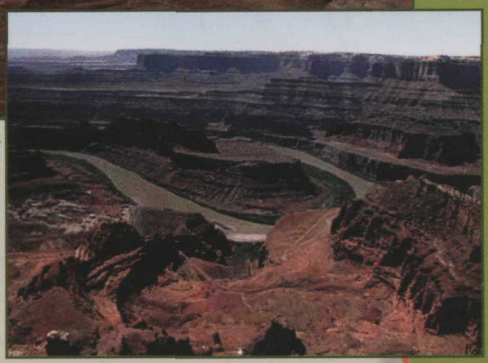
U.S. Geological Survey
Earth Science Information Center
2222 West 2300 South
Salt Lake City, UT 84119 (801-975-37420)

Utah Geological Survey
2363 South Foothill Drive
Salt Lake City, UT 84109 (801-467-0401)

Contact the Utah Geological Survey for other geologic publications, including: Geology and Grand County, Geologic Resources of San Juan County, and the Geologic Map of Arches National Park.

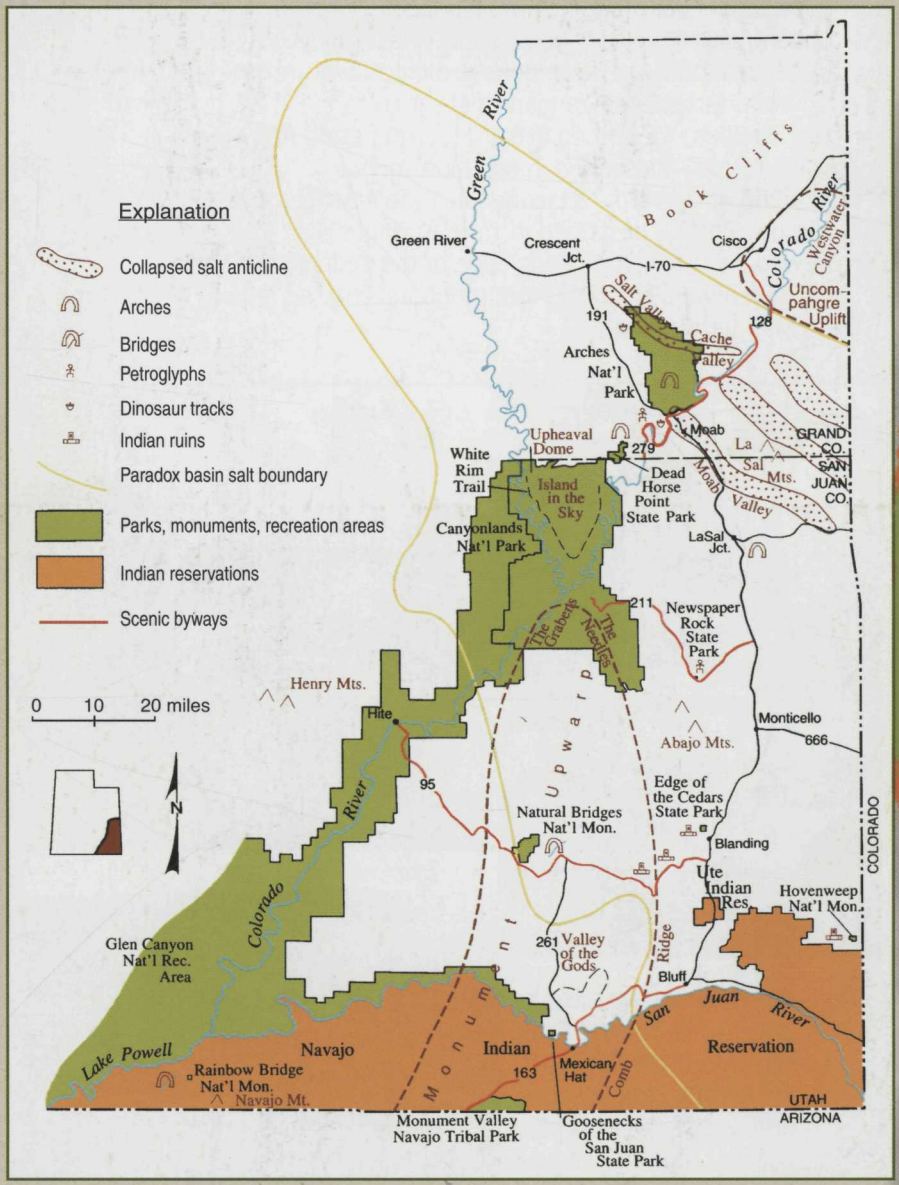
Features on Canyonlands Travel Region Map
(back cover)

Book Cliffs – described in Time Passages
Uncompahgre uplift – described in Time Passages
Upheaveal Dome, a mysterious geological feature, one theory is that it is a astrobleme, or giant meteor crater.
The Needles – described in Salt Movement and Rte 211
The Grabens – described in Salt Movement
Monument upwarp – described in Time Passages and Rte 95
Paradox basin – described in Time Passages
Newspaper Rock State Park, Edge of the Cedars State Park, and **Hovenweep National Monument** are situated around Indian ruins and petroglyphs.



Island in the Sky District of Canyonlands National Park and **Dead Horse Point State Park** (inset) offer inspiring views of nature's red artwork and the erosive power of the Colorado River. The White Rim Sandstone forms the terrace 1,000 feet below the Island in the Sky, upon which the 100-mile-long **White Rim Trail** can be traversed by mountain bike or jeep.

Canyonlands Travel Region



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