

Marble Canyon

SITE #090201

GC1TWZ3

Written & Researched by Dominique Robillard

SITE IDENTIFICATION

Nearest Community: Cache Creek, V0K 1H0

Parking: N 50°50.329'

W 121°42.048'

Geocache Location: N 50°50.034'

W 121°41.865'

Accuracy: 10 meters

Letterboxing Clues: Refer to letterboxing clues page

UTM: East 0591702;

North 5632161 10U

Geocache altitude: 823 m./2,699 ft.

Overall difficulty: 2

Terrain difficulty: 2.5

(1=easiest; 5=hardest)

Date Established: 1956

Ownership: BC Provincial Park

Access: • Highway

• Year-round

• Vehicle accessible

• *Detailed access information on next page.*



Marble Canyon's towering cliffs of mottled limestone and dolomite create the marbled effect that gives the canyon its name. The white to grey coloured rock walls and impressive rock formations are uncommon geological features in British Columbia. These massive structures rise up to an elevation of almost one kilometre above the canyon's three beautiful gem-like lakes, Turquoise, Crown and Pavilion.

Marble Canyon imparts a dramatic 500 million year old geological history. It is a part of the Pavilion Mountain Range which includes a limestone belt extending from the Cornwall Hills to as far north as Jesmond.

The limestone of the Marble Canyon formation belonged to a pacific island chain of volcanic plateaus, which were comprised of limestone deposits about five kilometres thick. The limestone was formed by single celled creatures named *fusulinid foraminifera*. These organisms would secrete a shell composed of calcium carbonate, which accumulated over the course of millions of years.

The theory is that this limestone shelf was situated to the west of the Cariboo Mountains and lay under fairly shallow water, adjacent to a deep ocean trench. Powerful earthquakes caused massive sections of the limestone shelf to fracture and fall, disappearing into the depths of the ocean trench.



For more information or to report a problem with this site please contact:

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Tel: 1-877-453-9467

email: info@exploregoldcountry.com

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The force of tectonic collisions and the gradual movements of the earth's crust caused Marble Canyon's section of the limestone shelf to buckle under the intense pressure, folding and rising up to its present location and altitude. Other plates collided with it, creating the remainder of British Columbia as we know it today. Marble Canyon's folding is rather complex because it

folded, refolded and faulted, creating the main canyon, a network of side canyons and many interesting rock formations. The Chimney Rock, also known as Coyote Rock by the local First Nations people, is just one of such formations.

The limestone of Marble Canyon matches the limestone of other isolated pockets in the Cariboo, the southern Yukon, the Pacific Rim, and various occurrences in Southeast Asia. Therefore, due to the plate movements of the continental drift, it seems that sections of the original limestone shelf traveled an incredible distance!

Fossils of Marble Canyon include *crinoids*, which are feathery armed primitive marine invertebrates that

thrived 300 million years ago. Also found are shells of *fusulineds* that formed the limestone and other marine evidence dating back 30 million years.

Two archaeological sites have been located in the canyon near Hat Creek Valley, where Indian pictographs can be seen. These ancient sites were occupied by the Interior Salish people who used the area to collect food.

Marble Canyon is a popular rock climbing destination as its beauty is relatively untouched. In winter, the waterfall at the west end of Crown Lake provides superb and easily accessed ice climbing. It can be accessed by a one kilometre trail along the lakeshore.

The colours of the canyon's three lakes are amazing. Turquoise Lake is appropriately named, Crown Lake has a more golden hue, and Pavilion is a marvelous turquoise and quite unique for its microbialite, fresh water coral formations.

Detailed access information:

- From the east, follow Hwy #97N to the junction of Hwy #99 (at Hat Creek Ranch). Turn west and continue for 26 km.
- From Lillooet, travel 30 km northeast on Hwy #99.
- Park at unmarked pullout on the west end of Crown Lake.
- Take trail to waterfall.

BIBLIOGRAPHY & SOURCES

- BC Parks, Kamloops Area Pilot Project Team. (1996, November). Management Plan for Marble Canyon Provincial Park. Retrieved March 1, 2009, from Ministry of Environment, Lands and Parks Web site: http://www.llbc.leg.bc.ca/public/PubDocs/bcdocs/363181/marble_cyn_mp.pdf
- Eyer, J. (2009). Echo Valley Ranch and Spa A Natural History. Retrieved March 1, 2009, from Echo Valley Ranch and Spa Web site: http://www.evranch.com/media_corner_evr_natural_history.asp
- Marble Range. In *Canadian Mountain Encyclopedia* [Web]. Retrieved March 1, 2009, from: <http://www.bivouac.com/ArxPg.asp?ArxId=1314>
- Mathews, B., & Monger, J. (2005). *Roadside Geology of Southern British Columbia*. Missoula, MT: Mountain Press Publishing Company.