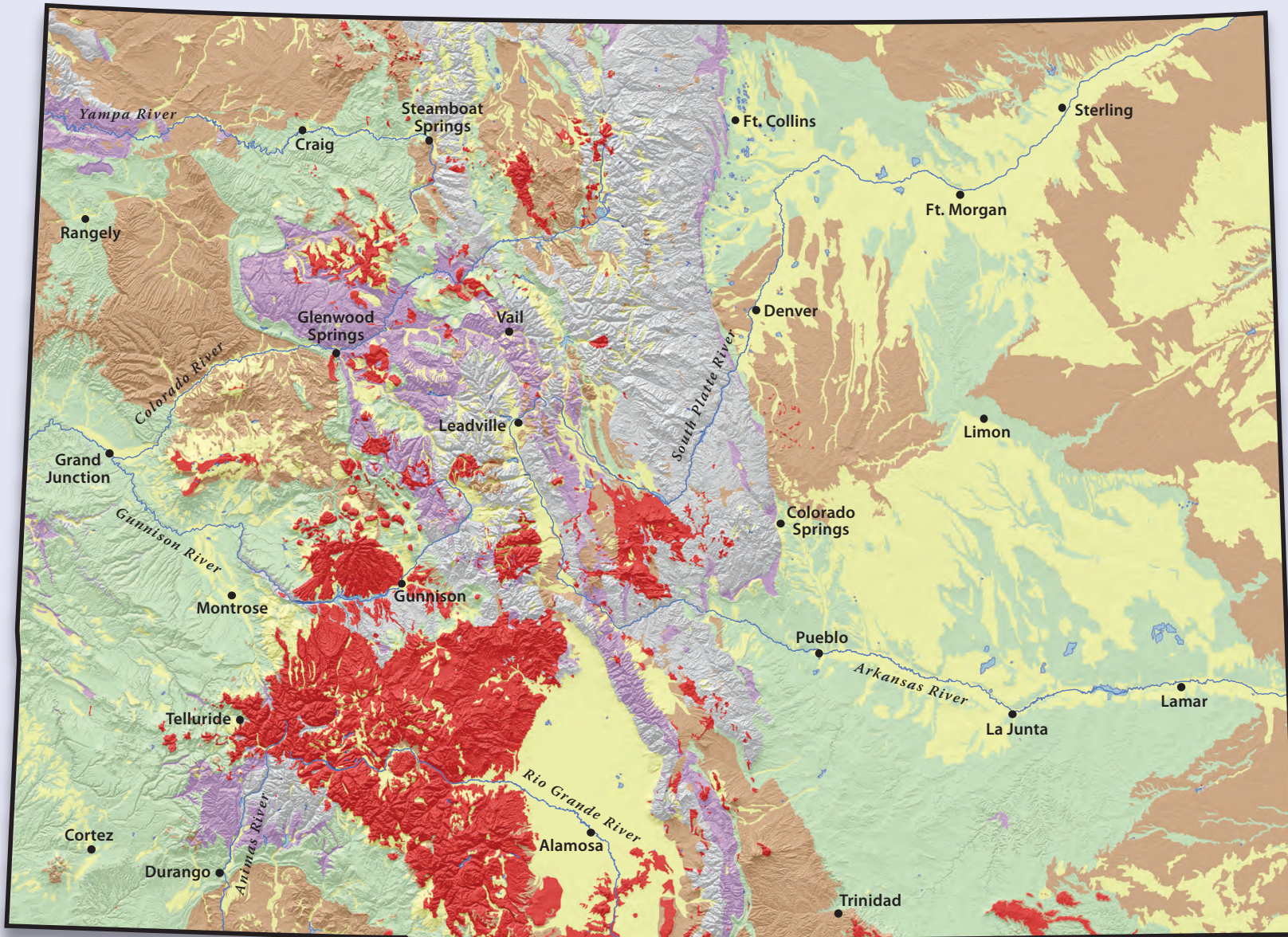


Generalized Geology of Colorado



Ages of Colorado Rocks:

CENOZOIC: 0–65 million years ago (mya)

- unconsolidated deposits
- sedimentary rocks
- igneous rocks

MESOZOIC: 65–251 mya

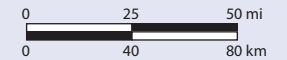
- sedimentary rocks

PALEOZOIC: 251–542 mya

- sedimentary rocks

PRECAMBRIAN: 542 mya–2.8 billion years ago (most are 1.7 or 1.4 billion years old)

- igneous & metamorphic rocks

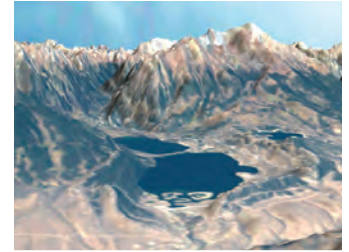


Colorado has magnificent geology and it is beautifully displayed for all to see. The state holds many of the biggest, the best, the first, and the most diverse.

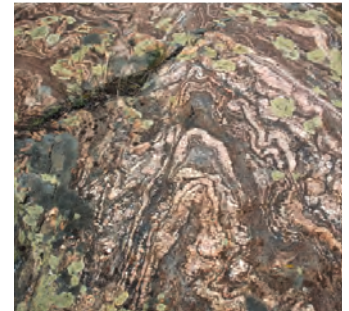
For instance, did you know:

- the Rocky Mountains have 58 peaks over 14,000 feet high, all of them in Colorado?
- Colorado has the highest average elevation of any state (6,800 feet), with more than two vertical miles between its lowest and highest points?
- more than 774 different types of minerals are found in Colorado and the largest faceted diamond produced in the United States came from Colorado?
- Colorado has more than 30,000 square miles of wind-blown deposits and virtually every kind of sand dune, including fossil dunes?
- the first dinosaur discovered in western North America and the first *T. Rex* in the world were found in Colorado?
- one of the most diverse, fossil tropical rain forest leaf assemblages in the world was found near Castle Rock?
- the world's only fossil tsetse flies and fossils of the world's oldest roses, cheetahs, and ferrets were found in Colorado?
- two of the world's largest molybdenum deposits and the world's largest titanium deposit are located in Colorado?
- the second oil field in the U.S. was discovered in Colorado?
- more than half of Colorado's counties produce oil and gas and more than 70,000 wells have been drilled for oil and gas in Colorado?
- a suburban area southwest of Denver has the highest annual monetary loss in the nation from swelling soil?
- Colorado has the greatest number of avalanches in the lower 48 states and the most avalanche-related deaths in the U.S.?
- Colorado has real glaciers in the Front Range and some of the most spectacular rock glaciers in the world?
- Colorado's Yule Marble was used in the Lincoln Memorial and the Tomb of the Unknowns, and at the urging of a Girl Scout Troop, was declared Colorado's official state rock in 2004?
- Colorado is the birthplace of 6 major rivers and they flow into 18 other states?
- Colorado experienced a Magnitude 6.6 earthquake in 1882 and is the world's outstanding laboratory for human-triggered earthquakes?
- the oldest rock in Colorado is 2.7 billion years old and the youngest volcanic rock is only 4,150 years old?
- some of the metamorphic rocks in Colorado's mountains were formed at a pressure of 67 tons per square inch?

—Compiled by V. Matthews



Mount Elbert is the highest point in Colorado (and the Rocky Mountains) at 14,433 feet above sea level. It looms one mile above the Twin Lakes at its base. The lakes are dammed by glacial moraines.



These 1.7 billion-year-old, metamorphic rocks in Black Canyon of the Gunnison National Park were folded and changed by intense heat and pressure.

Colorado National Monument (below). Photo courtesy of Dr. Rob Kurtzman.

“On all the broad extent of these United States certainly no region can be found which represents more facts of interest, more opportunities for investigation, and greater possibilities of new discoveries, than the state of Colorado.”

—S.F. Emmons, 1883, United States Geological Survey. From presidential address to the inaugural meeting of the Colorado Scientific Society.

