

YOUR FREE READER'S COMPANION

The Roadside Geology Companion

A companion to Colorado Geology Guide · by R. J. Westfield

Thanks for picking up the guide. This is the part you keep in the glovebox: a quick rock ID card, the best road cuts by highway, a fossil and mineral site list, and a field checklist for your next drive. Print it, fold it, keep it on the dash.

You don't need a degree to read Colorado's rocks — you need to know what four or five things look like and where to pull over. That's this card. — R. J.

Quick Roadside Rock ID

The five rock types you'll see most along Colorado highways, and how to tell them apart at a glance (or a quick stop).

Rock	Look	Where you'll see it
Granite (igneous)	Speckled gray/pink, hard, coarse crystals	Front Range cores, RMNP, Pikes Peak
Sandstone (sedimentary)	Layered, tan to deep red, gritty	Red Rocks, Garden of the Gods, Flatirons
Shale (sedimentary)	Fine, crumbly, gray/dark, splits in sheets	Road cuts on the plains, Mancos Shale
Limestone (sedimentary)	Light gray, fizzes with vinegar, fossils	Leadville district, canyon walls
Gneiss/Schist (metamorphic)	Banded, foldy, shiny mica flecks	Big Thompson, Black Canyon walls

The 3-second tests

- Fizz test: a drop of vinegar fizzes on limestone (calcite). No fizz = not limestone.
- Scratch test: can you scratch it with a knife? Soft = shale/limestone; hard = granite/quartzite.
- Layers? Flat layers = sedimentary. Bent/banded = metamorphic. Speckled, no layers = igneous.

Best Road Cuts & Stops, by Highway

Highway	Don't miss
I-70 (Front Range to mountains)	Dakota Hogback, Idaho Springs gneiss, Glenwood Canyon walls
US-550 "Million Dollar Hwy"	Red Mountain mineralization, Uncompahgre uplift
Trail Ridge Rd (US-34)	Precambrian basement, glacial cirques, alpine tundra
US-285 (South Park)	Fault valleys, ancient sea-floor sediments
US-160 (Wolf Creek to Mesa Verde)	Volcanic San Juans to Mancos Shale to cliff sandstone
Black Canyon (CO-347)	1.7-billion-year-old gneiss, sheer walls

Fossil & Mineral Sites (legal, accessible)

Always check current access rules; collect only where permitted, never in national parks.

Site	What	Note
Florissant Fossil Beds NM	Petrified redwoods, insects	Look, don't collect (protected)
Dinosaur Ridge (Morrison)	Dino tracks & bones in situ	Roadside, free
Garden of the Gods	Tilted red sandstone fins	Visitor center geology room
Leadville / Mosquito Range	Pyrite, galena, calcite	Mining district; check claims
Royal Gorge / Cañon City	Cretaceous marine fossils	Classic dinosaur country
Creede / San Juans	Quartz, amethyst, ore minerals	Old mining country

Field-Trip Checklist

Toss these in the car before you go:

- This card + the book (obviously)
- A hand lens (10x loupe) — turns a gray rock into a crystal garden
- Small vinegar dropper bottle (the fizz test)
- A pocket knife (scratch test)
- Work gloves + sturdy shoes
- Camera/phone (photograph, don't pocket, in protected areas)
- Water, sun protection, and a paper Colorado map (cell service dies in the canyons)
- A small notebook — jot the mile marker and what you saw

That's the companion. On your next drive, try just the three tests — fizz, scratch, layers — on one road cut. Once you can name what you're looking at, you'll never road-trip Colorado the same way again. When the guide's earned its place in your glovebox, I'd love to hear about it, and in a couple of emails I'll tell you how a quick word from you helps it reach the next curious traveler.

See you out there,

R. J. Westfield