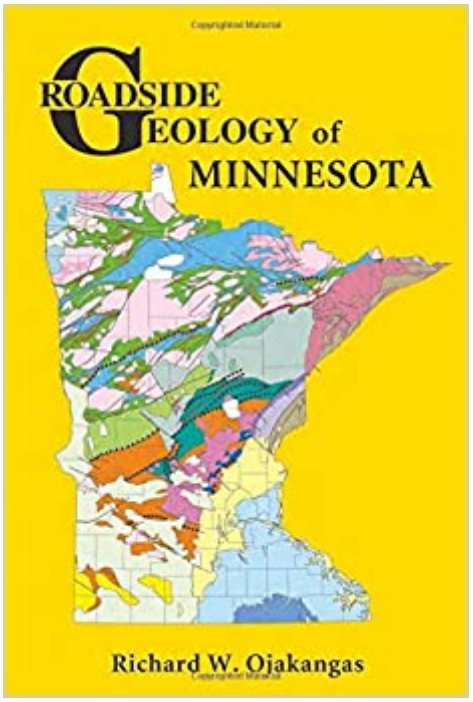
Roadside Geology Of Minnesota (Roadside Geology Series)



Synopsis

You may have heard that Minnesota s ten thousand lakes are the hoofprints of Paul Bunyan s big blue ox, Babe. Don t you believe it! writes author Dick Ojakangas. Though the lakes, which formed at the end of the most recent ice age, may be Minnesota s most famous features, the glaciated countryside disguises a much longer history of volcanoes and plate collisions not surprising when you learn that Minnesota was at the active edge of the fledgling North American continent for several billion years.Roadside Geology of Minnesota steers you over glacial moraines and till plains to some of the state s unparalleled geologic features, such as the Morton Gneiss, once thought to be the oldest rock on Earth; the St. Peter Sandstone, one of the purest sandstones in the world; the banded iron-formation, the source of iron for the Great Lakes steel industry; and the ancient shorelines of Glacial Lake Agassiz, one of the largest glacial lakes ever to have existed in North America. The book’s introduction presents an overview of Minnesota s geologic history, and forty-two road guides discuss the landforms and rocks visible from a car window and at nearby waysides and parks, including Pipestone National Monument, Grand Portage National Monument, and Voyageurs National Park.

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Customer Reviews

You may have heard that Minnesota’s ten thousand lakes are the hoofprints of Paul Bunyan’s big blue ox, Babe. "Don’t you believe it!" writes author Dick Ojakangas. Though the lakes, which formed at the end of the most recent ice age, may be Minnesota’s most famous features, the glaciated

countryside disguises a much longer history of volcanoes and plate collisions--not surprising when you learn that Minnesota was at the active edge of the fledgling North American continent for several billion years. "Roadside Geology of Minnesota" steers you over glacial moraines and till plains to some of the state's unparalleled geologic features, such as the Morton Gneiss, once thought to be the oldest rock on Earth; the St. Peter Sandstone, one of the purest sandstones in the world; the banded iron-formation, the source of iron for the Great Lakes steel industry; and the ancient shorelines of Glacial Lake Agassiz, one of the largest glacial lakes ever to have existed in North America. The book's introduction presents an overview of Minnesota's geologic history, and forty-two road guides discuss the landforms and rocks visible from a car window and at nearby waysides and parks, including Pipestone National Monument, and Voyageurs National Park.

Richard W. Ojakangas grew up on glacial till in Warba, Minnesota. He received a bachelor s degree in geology from the University of Minnesota-Duluth and a doctorate from Stanford in 1964. He taught at the University of Minnesota-Duluth for thirty-eight years and is the author of numerous articles and other publications on geology, including Minnesota s Geology. Dick lives with his wife, Beatrice, in Duluth and celebrates his Finnish heritage whenever he gets the chance.

Richard Ojakangas is a native Minnesotan whose life has been spent in learning about and teaching Minnesota's geological history. He taught at the U of M in Duluth for over 30 years, and is the author of Minnesota's Geology, which is probably the definitive geology book on the North Star State.That book, however, is not quite meant for the casual reader (although its less imposing than many other books of the type). Minnesota has lacked a Roadside Geology style book for too long. After years without one, Ojakangas has finally written a book for the non-scientist, the latest in the Roadside Geology series, the Roadside Geology of Minnesota.It's been worth the wait.After an introduction to the geological history of Minnesota (as you might expect, the Pleistocene, with its glaciations, gets a lot of space) as well as some basic geology to get those who avoided the rock science in high school or college, the book divides into several sections based on Geography. (Northeastern, Northwestern/Central, Southwestern, Southeastern)In each section, Ojakangas gives a general overview of the Geology of that area followed by the meat of the book, Road Guides.There are plenty of photographs, maps and diagrams to elucidate the text and keep travelers oriented as they visit the various highlighted sites. I learned about plenty of sites that were just off of my route in previous travels that I will definitely visit with book in tow. I had no idea, for instance, of a beautiful beach of rhyolite pebbles lies just 3 miles north of Gooseberry Falls. I'd never heard of Chimney

Rock, a spire of sandstone a few miles off of US 61 on the way south from St. Paul. In addition, I have an appreciation for places and locales I have seen, now having a better geological context for them. The composition and nature of Barn Bluff in Red Wing, for instance. I had no idea there's a fault that has shifted the layers on one side of it!Armchair amateur geologists who buy the Roadside series of volumes will not want to miss this latest volume.I most especially recommend this book, though, for any and all Minnesota travelers interested in the physical geology of the state to buy the book, read it, and then take it with you on your next road trip to, say, Gooseberry Falls, or Winona, or the Boundary Waters, or Pipestone. I certainly will!

Dick Ojakangas has produced a very good and user friendly guide to Minnesota's roadside geology. Along with a good presentation of lots of easily observable geology, there is also some good background science, all spiced with additional interesting observations, whether of history, nature or human nature, along with dashes of his wry sense of humor. There are also lots of helpful maps, charts, diagrams and photos to illustrate what is presented in the text. Read through a relevant section before you head out on a trip, bring it along to refer to for directions as you travel, read the descriptions as you contemplate the outcrops and study samples at the many stops you'll make along the way. Collect your own samples (where allowed), take your own photos, drive and park safely, and enjoy your trip along the road and through Minnesota's interesting geologic history.Full disclosure: the author was one of my favorite geology professors a few decades back. :-)

I have been fortunate to have participated in a Field Trip lead by Dr. Ojakangas, and just like his lectures and field trips, he sprinkles this book with humorous anecdotes, bits of Indian Folklore, obscure facts about Minnesota's history, and of course, a lot of geology. If you enjoyed and learned a lot from Dr. Ojakangas's book "Minnesota's Geology" coauthored with Charles L. Matsch in 1982, you will be delighted with "Roadside Geology of Minnesota".The book's introduction begins with an extensive overview of Minnesota's geology. A discussion of plate tectonics with illustrative diagrams and maps, sets the stage for a review of the Midcontinent Rift System, which is responsible for the volcanic rock found along Lake Superior's shore. Beginning with Archean Time 4.5 billion years ago, down through the Proterozoic, Paleozoic, Mesozoic, Tertiary, through the glacial periods of the Pleistocene, Minnesota has geological evidence of it all (except for what the glaciers may have removed or redistributed.)Following the primer on basic geology, the book is divided into four sections, based upon the regions of the State: Northeastern, Northwestern and Central, Southwestern, and Southeastern. If you know anything at all about the geology of Minnesota, you

will not be surprised to find that the section on the Northeast is the longest, and the most interesting, geologically. The Northeastern section is home to the mines of the Mesabi, Biwabik and Cuyuna iron ranges, Lake Superior’s scenic Highway 61, amazing road cuts, the Sudan Underground Mine State Park, classic examples of greywacke, agates, and Warba -- the home town of Dick Ojakangas. And if you thought that "Cuyuna" was an Indian word, you will be surprised to find out where it really came from when you read the book.The Road Guides in each section give detailed descriptions of the geology to be found, what caused it, and the mile marker numbers that correspond with interesting stops. From the Pipestone and Sioux Quartzite of southwestern Minnesota to the pillow basalt in Ely, from the karst country of southeastern Minnesota to the ancient Lake Agassiz shorelines in the northwest, and all the glacial lakes, till, drumlins, eskers, kames and kettles in between, Dick Ojakangas includes it all. There are many color photographs of geologic features throughout the book, many of which I recognized from field trips past.This book is great for armchair geologists. If you don’t want to follow the road guides and explore further, you should still read the book. After you read it, keep it in your car, for you never know when you might be on the road and come across an interesting geological feature that piques your curiosity. Having a geologist in the car while traveling in Minnesota is something I’ve often wished for. Traveling with the "Roadside Geology of Minnesota" goes a long way to fill that void.