

Developing Geoheritage along the Gold Belt Byway, Colorado

Herbert W. Meyer¹, Melissa Smeins², and Thomas Casadevall³

¹ National Park Service, Florissant, CO ² Bureau of Land Management, Cañon City, CO ³ U.S. Geological Survey, Lakewood, CO

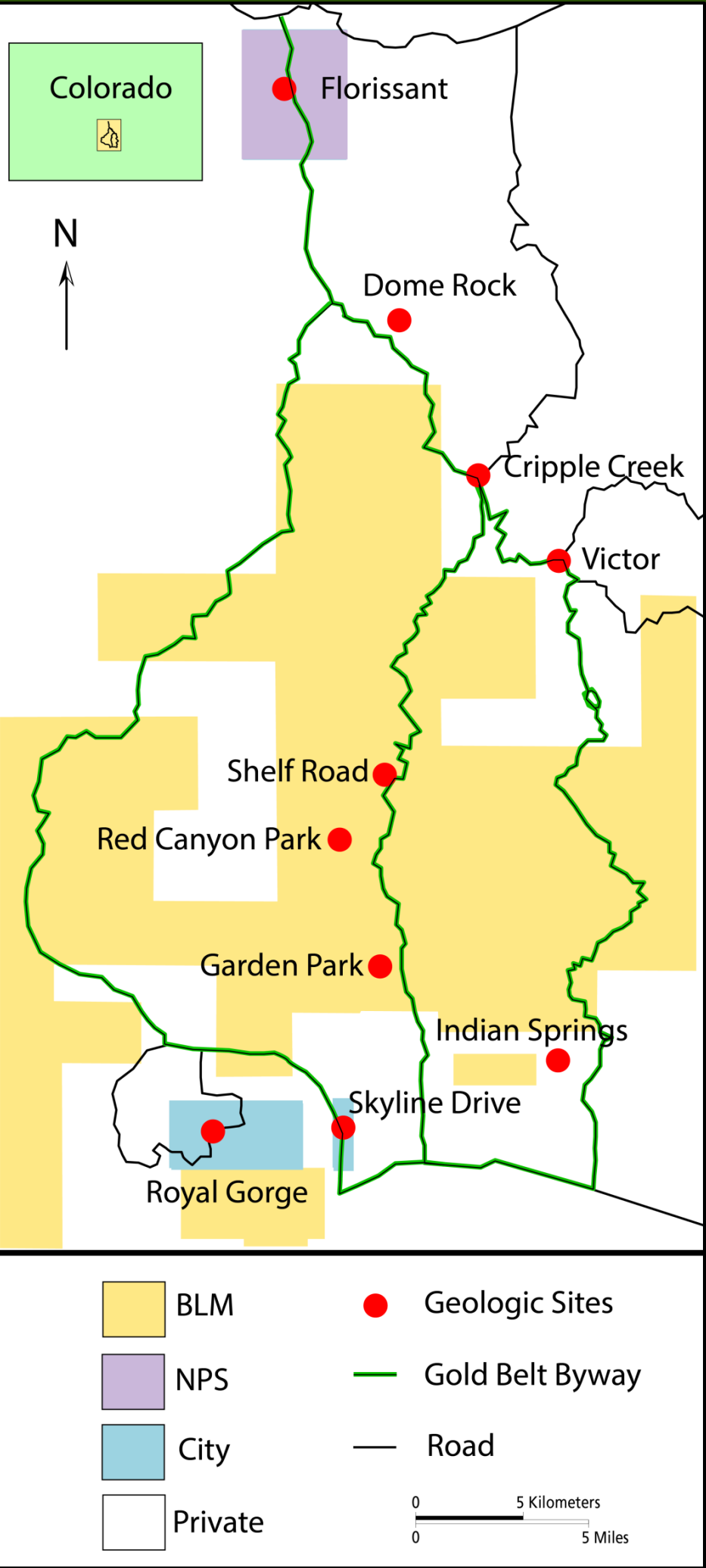


Gold Belt Tour National Scenic Byway

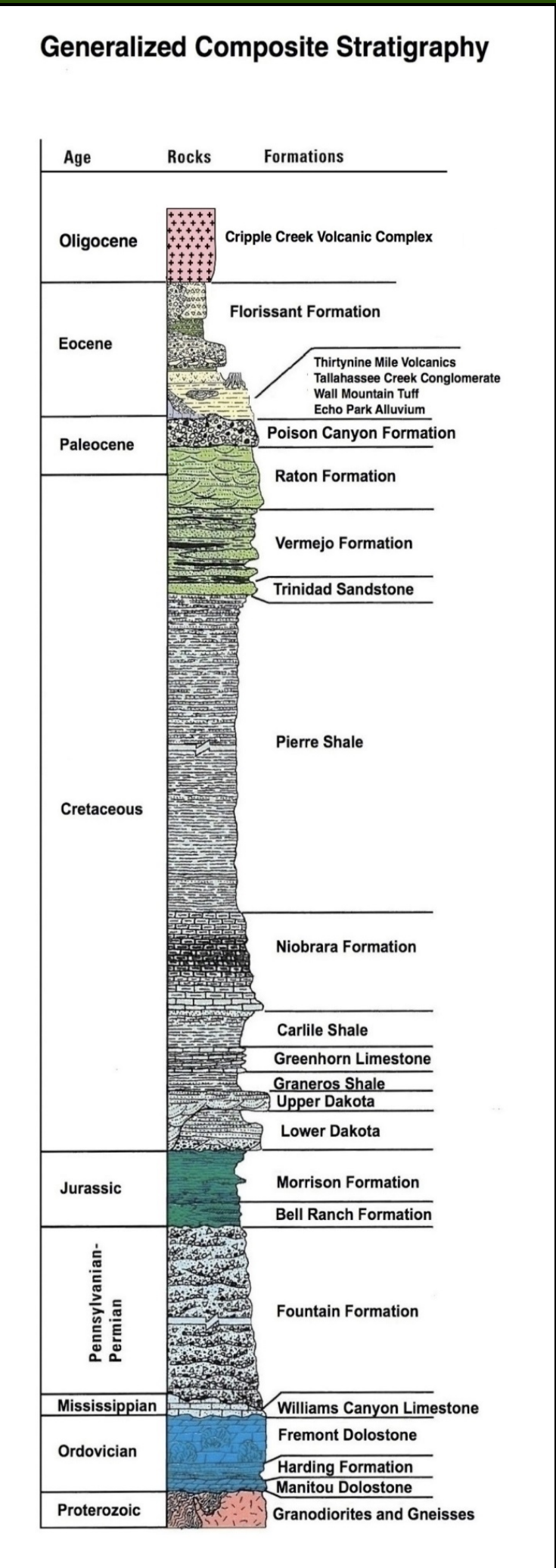
This designated route in south-central Colorado traverses 1.8 billion years of Earth history. Sites along the route are known internationally for their historic and scientific significance to geology, paleontology, and mining. The lands are managed by the Bureau of Land Management (BLM), the National Park Service (NPS), local city governments, and private land owners including a large gold mining company and a ranch with a National Natural Landmark.



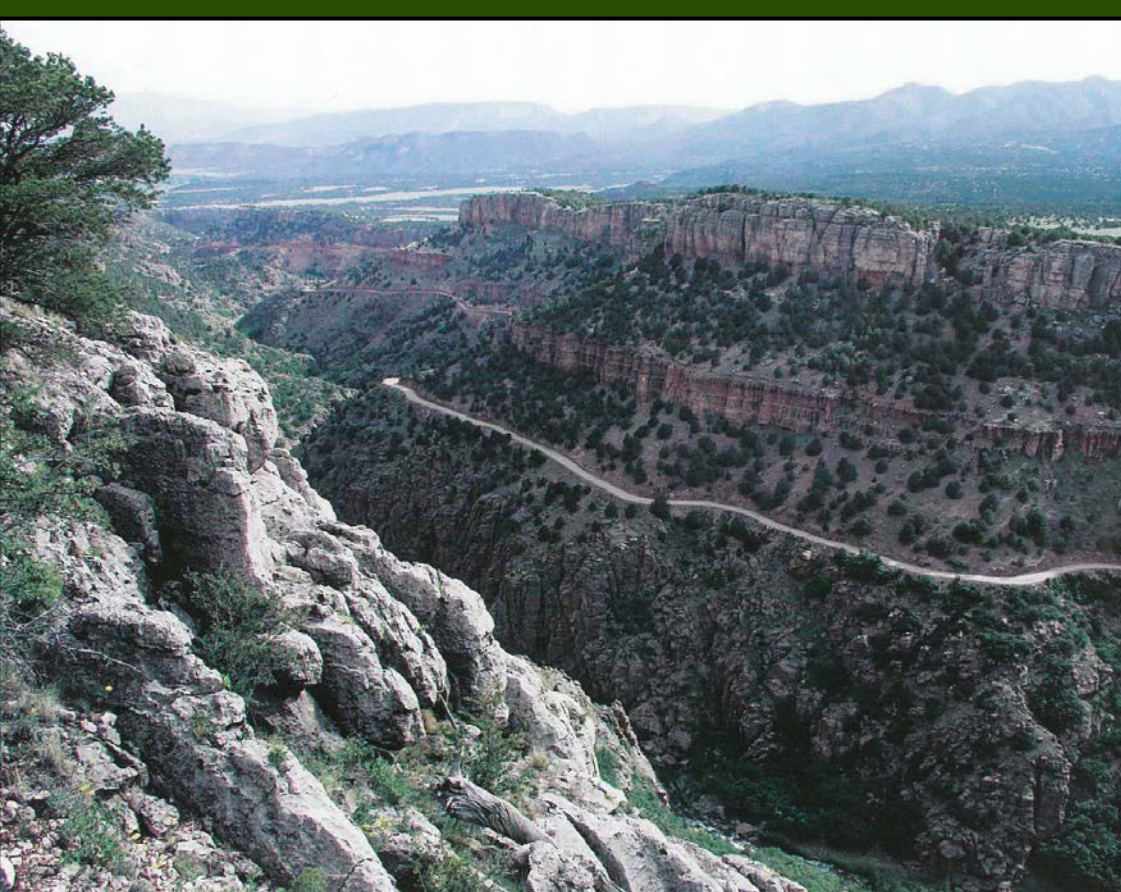
The Gold Belt Tour National Scenic Byway follows three N-S roads between Cañon City and Florissant, Colorado.



Geologic Assets of the Area



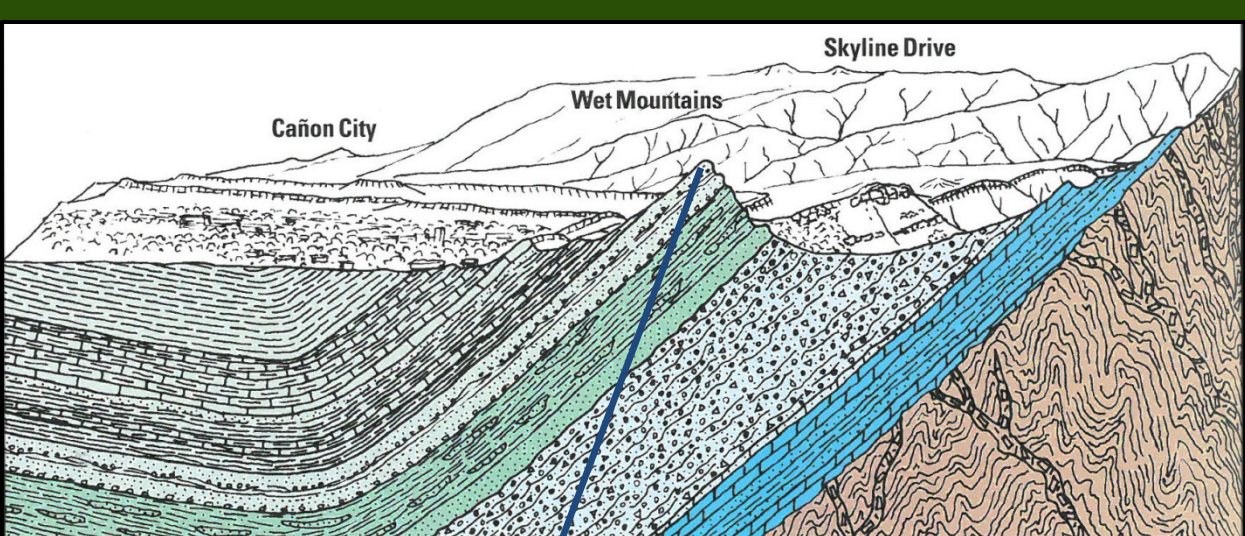
- 1.8 billion years of Earth history within a small geographic area
- Many rock units including sedimentary, igneous, and metamorphic rocks
- Landmarks such as the Dakota Hogback, Red Canyon erosional spires, the Royal Gorge, Phantom Canyon, the Shelf, the remnant of the Guffey volcano, and Dome Rock
- Paleontological type localities at Florissant, Garden Park, and Indian Springs
- Dinosaurs, giant petrified redwoods, and marine fossils
- Historic sites relating to early fossil collecting, gold mining, and oil drilling



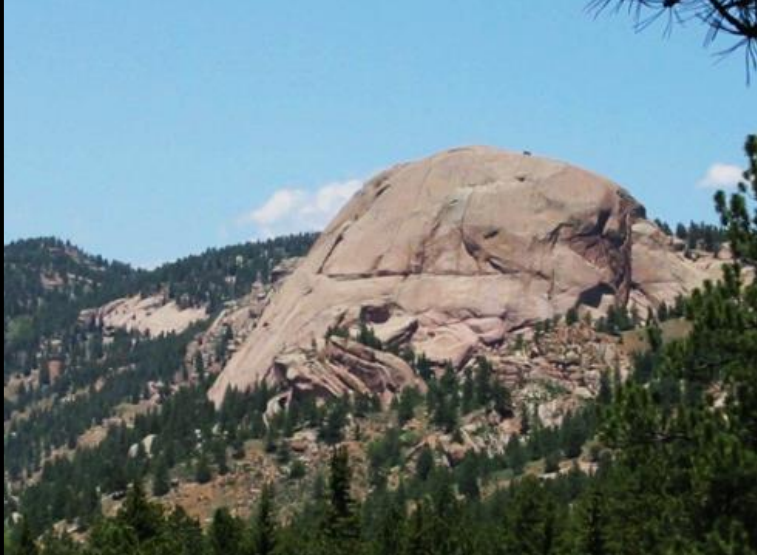
Shelf Road follows the Great Unconformity.



Royal Gorge is incised into 1.7 Ga gneiss.



Skyline Drive follows the Dakota hogback.



Dome Rock is an exfoliation dome in Pikes Peak Granite.

Scenic Geologic Landmarks

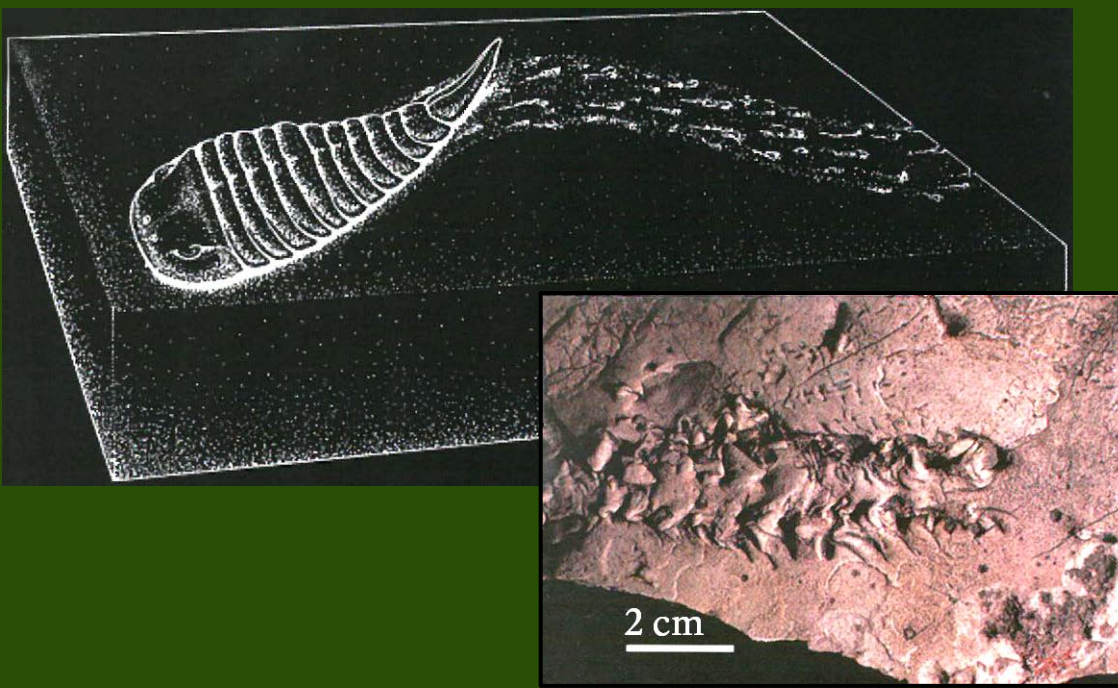
Paleontological Sites



The Garden Park fossil area is the type locality for many dinosaurs such as *Stegosaurus* and *Allosaurus*.

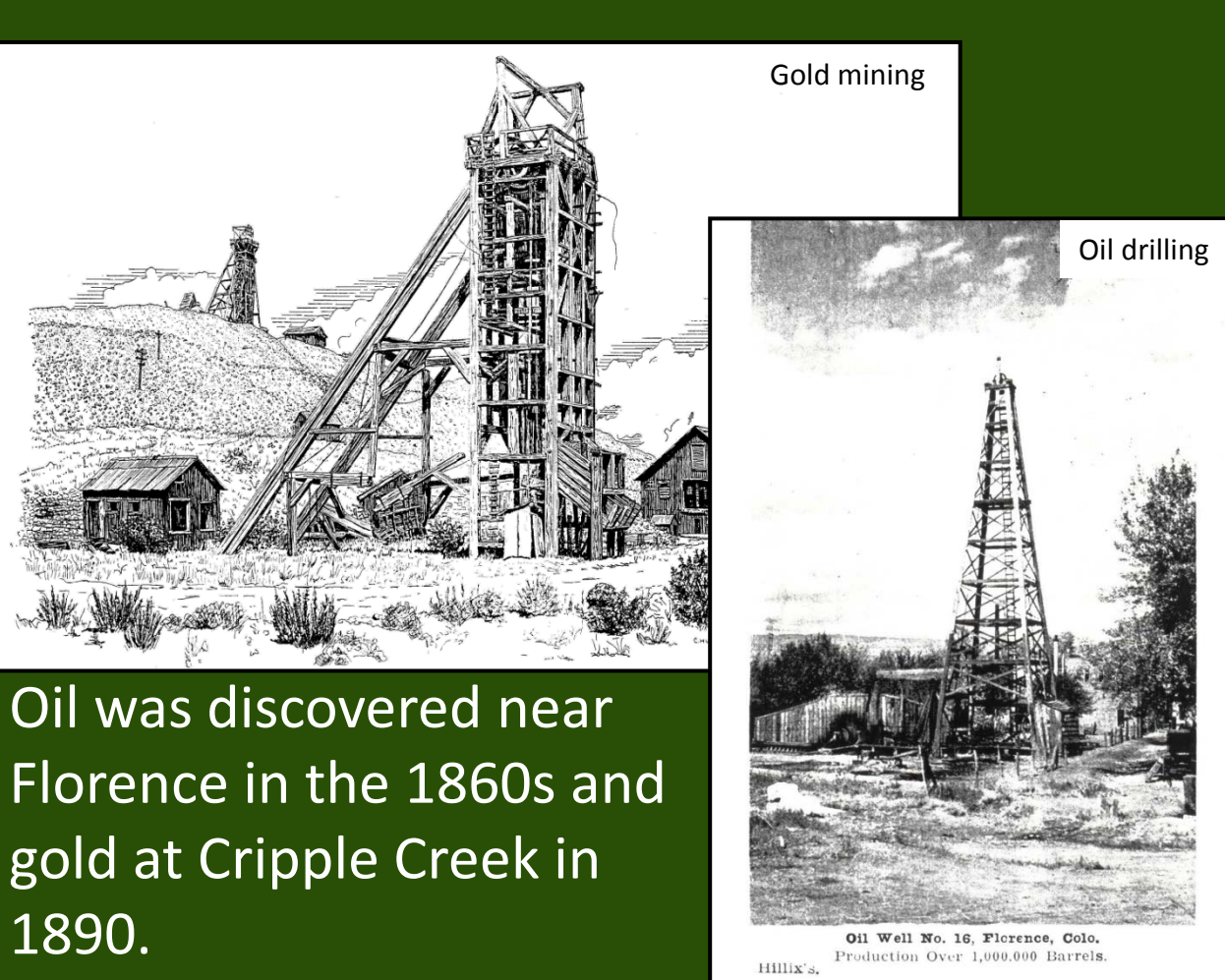


The Florissant Fossil Beds is the type locality for 1,700 species of Eocene plants, insects, and spiders.



Indian Springs trace fossil site preserves Ordovician marine trackways.

Historic Sites

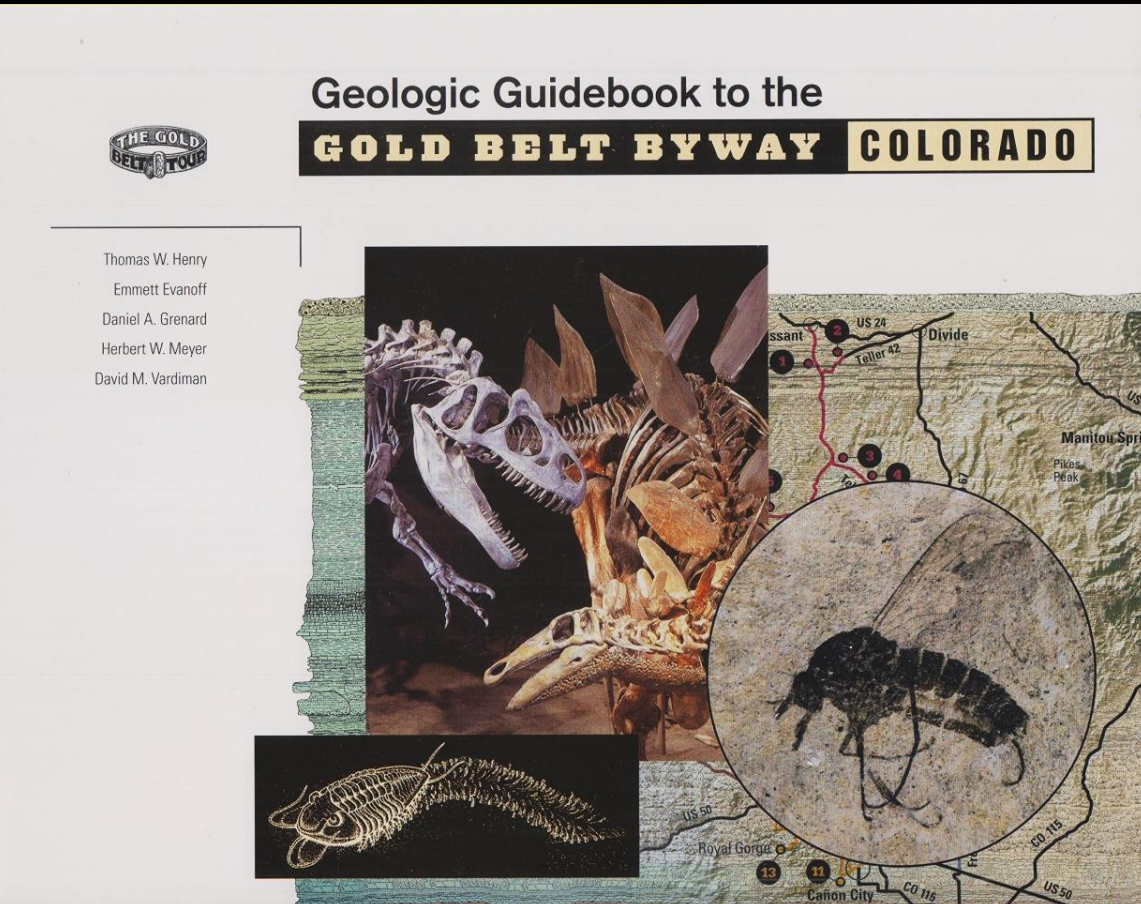


Oil was discovered near Florence in the 1860s and gold at Cripple Creek in 1890.



The Garden Park fossil area was one of the settings for the Cope-Marsh Bone Wars of the 1870s-80s.

Materials, Facilities, and Programs to Promote Geoheritage



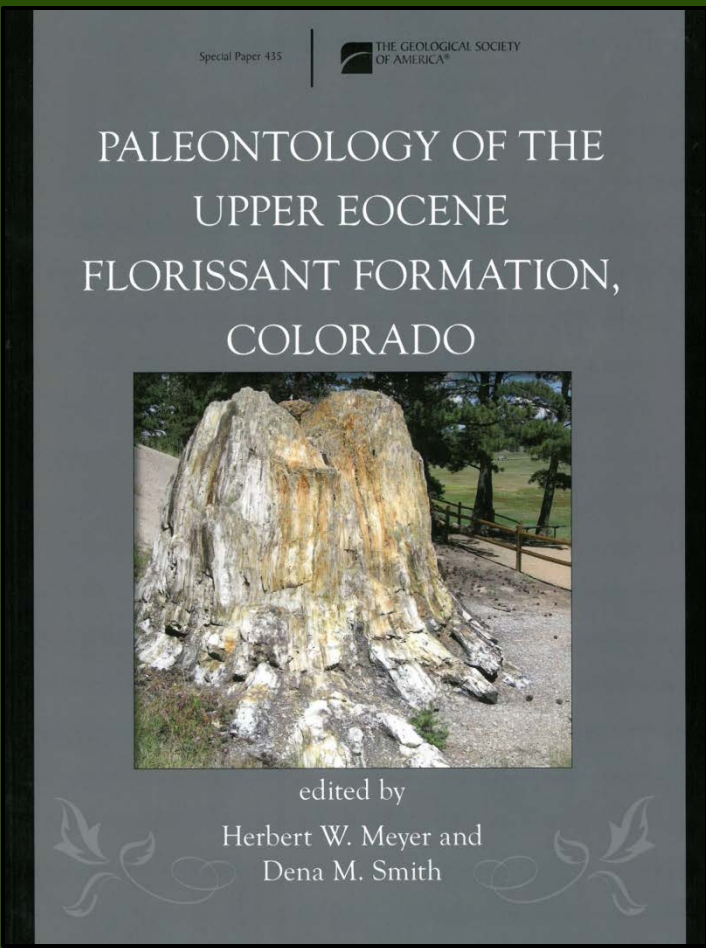
The Geologic Guidebook to the Gold Belt Byway (published in 2004) established a foundation for our current geoheritage planning.



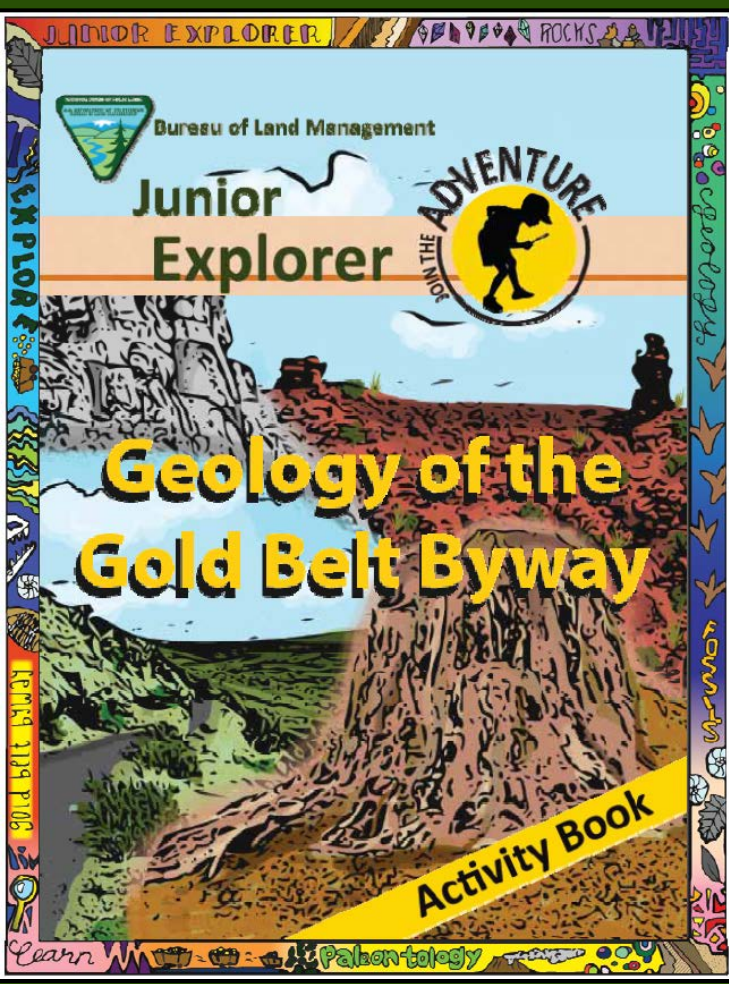
Practical experience is provided for GeoCorps™ America interns who work with professional geologists and paleontologists at NPS and BLM. The work these college students do benefits their own career development and also contributes to the stewardship and public understanding of the geologic resources.



Trailside exhibits offer opportunities to explore local geology and mining history.



On-site learning experiences are provided by field trips sponsored by the Geological Society of America and various universities, as well as seminars offered by the Friends of the Florissant Fossil Beds.



A new “Junior Explorer” booklet produced by BLM provides geology activities for grade school kids. The booklet was designed by GSA GeoCorps™ America interns working for BLM and NPS during the summer of 2015.



Several museums along Byway provide exhibits and programs on geology and history. Facilities range from the historic museums in Cañon City and Cripple Creek to the new visitor center at Florissant Fossil Beds National Monument.



Visiting school groups gain hands-on learning experiences about geology and fossils at several of the sites on the Byway.

Active scientific research is supported by NPS and BLM to provide new knowledge about the region’s geology and paleontology.

Initiatives for Geopark Designation

Background

The NPS, BLM, and other partners have collaborated to prepare a nomination for designation of the area as the first UNESCO Geopark in the United States. GSA GeoCorps™ America interns assisted these agencies to evaluate and map potential sites along the route. U.S. involvement in Geoparks later became unrealistic for geopolitical reasons. Today, the agencies continue collaboration under a new initiative to establish a national Geopark committee.

Chronology of Efforts to Date

- ~2008 – Florissant Fossil Beds National Monument was suggested by NPS for potential nomination as a World Heritage site, and later for UNESCO Geopark designation.
- 2009 – Geopark concept was broadened to include all of the Gold Belt Byway, and BLM joined in the effort to move forward with the nomination procedure.
- 2009-2011 – Meetings were held with local groups, including the Gold Belt Tour Byway Association, but support and enthusiasm for the initiative was mixed.
- 2010 – Sites along the Byway were evaluated for potential inclusion in a UNESCO Gold Belt Byway Geopark, resulting in a 60 page proposal ready for submission.
- 2011 – Initiative was halted due to complications with U.S. involvement in UNESCO.
- 2013 – *America’s Geologic Heritage* meeting was held in Denver and proposed the idea of creating a national geoheritage designation within the United States.

Ongoing Initiatives and Issues

- Gold Belt proposal provides a model for establishing the first U.S. Geopark.
- Better grassroots involvement and local community support are needed to embrace the concept and envision the economic benefits.
- Local leaders and organizations in this conservative rural community are divided in their support for the initiative.
- Future plan is to move forward with a U.S. Geoparks National Committee.

Acknowledgements

Elizabeth Waite and Allison Vitkus worked as GeoCorps™ America interns to prepare the Geopark proposal. The Gold Belt Tour Byway Association was involved in facilitating discussions in the local community. Katie McComas, Mariah Slovacek, Conni O’Connor, and Michelle Wheatley assisted with the design and review of the poster.