

Earth Science events

Thurs., Mar. 11, Friends of Mineralogy bimonthly meeting; 7:30 p.m., Denver Museum of Nature and Science, V.I.P. Room (enter via staff/security desk door on north side), **Black Smoke & White Iron, A History of Colorado Kilns, Ovens, Furnaces and Rails**, by William Reich, historian & author. All are welcome to attend; no charge. "Colorado's smelters and steel mills were instrumental in turning her mineral wealth into bars of gold and silver and just as importantly into steel rails for her expanding railroad network. The smelter furnaces that accomplished this used free carbon in the form of coke and charcoal to create the reducing atmospheres necessary for the proper operation of blast furnaces. The production of these two materials was big business in the state and the major topic of William Reich's book, Black Smoke and White Iron, published by the Colorado Railroad Museum in 2009."

Fri., Mar. 12, USGS Free GPS, Map, & Compass Class; held in Building 810 on the Denver Federal Center, Lakewood; Map & Compass sessions are in the morning, 9-11:30 a.m., and "Using GPS with Topo Maps" in the afternoon, 12:30-5:00 p.m.; you may sign up for either or both classes. Free to anyone, but reservations are required and space is limited; call 303-202-4689 or write to gpsworkshops@usgs.gov. Classes will not always be held every month this year; to check on future dates and for more info., please see <http://www.cr.usgs.gov/gpsworkshops/>

Fri., Mar. 12, What's this Rock?; 7:00 p.m., Lookout Mountain Nature Center, 910 Colorow Rd. Golden, CO, phone 720-497-7600 "This program is an elementary introduction on how to identify common minerals and rocks. Learn how minerals and rocks form, how they are classified, how geologists determine their ages, and what they can tell us about Earth's history. Ages 13 – adult. This is a free program but registration is required. Please visit <http://lmnc.jeffco.us> to register."

Fri., Mar. 12, Denver Gem & Mineral Guild monthly meeting; program, Colorado's Gemstone Deposits, by Dr. Pete Modreski, USGS. All are welcome to attend; no charge. 7:30 p.m. at the Geology Building, Berthoud Hall, Room 109, 1516 Illinois Street, Colorado School of Mines campus, Golden. Enter via the south side door on ground level.

Sat., Mar. 13, for kids: Dinosaur Detectives," Footprint Frenzy," Short course on dinosaur footprints at the Dinosaur Ridge Visitor Center with a short field trip up to the Tracksite on Dinosaur Ridge, for 6 to 9 year olds, other ages welcome. 10 am – 11:30 am. Free. 16831 W. Alameda Parkway; Morrison; for more info call 303-697-3466.

Wed., Mar. 17, Timely Science: Voices of Yesterday, Science of Today, 12:15 p.m., a DMNS Curators Lunchtime Lecture; John Demboski, PhD, curator of vertebrate zoology, Zoology Department; and Mary Jane Bradbury, Museum enactor; Ricketson Auditorium; free with Museum admission.

Sat., Mar. 20, Rocks and Minerals; 9 a.m., Lookout Mountain Nature Center, 910 Colorow Rd. Golden, CO, phone 720-497-7600. “Enjoy an auto tour with Jack Reed, Emeritus Scientist at the U.S. Geological Survey, to see and learn about typical outcrops of sedimentary, volcanic, metamorphic and intrusive rocks in the local area. Discuss what we can learn from examining rocks in outcrops. Ages 13 – adult. This is a free program but registration is required. Please visit <http://lmnc.jeffco.us> to register.”

Thurs., Mar. 25, 10 a.m. - 12:30 p.m., Colorado School of Mines - Berthoud Hall 109, Class Room for GX-571 (a graduate-level course in geochemical exploration):
"Everyone is invited to participate when Travis Thompson and Bryan Ray with DeltaNu will be demonstrating a hand-held, point and shoot Raman spectrometer that is capable of identifying individual minerals as well as organic components of rocks, soils, sediments and vegetation in seconds. This multimedia spectrometer weighs less than 5 pounds and operates for about five hours on a single rechargeable battery. It interfaces with a laptop computer within a 100 meter range using Bluetooth technology. Unlike IR spectrometry, water does not interfere with the spectra and it looks through glass. Minerals within a dark rock matrix can be identified. It can be focused to characterize fluid inclusions within a mineral using a microscope stage. This instrument provides yet another opportunity for obtaining real-time measurements and contributing to more timely decision-making during all phases of minerals development and particularly exploration. Graham Closs, Geology & Geological Engineering, CSM can be contacted for additional information (303-273-3856; lcloss@mines.edu)."

Fri-Sat-Sun, Mar. 26-28, Fort Collins Gem & Mineral Show, Lincoln Center, 417 W. Magnolia St.; 4-8 p.m. Fri., 9-6 Sat., 10-5 Sunday. For more info see <http://www.fortcollinsrockhounds.org/gemAndMineralShow.shtml>

Sat., Apr. 3, the Colorado School of Mines Geology Museum will hold a "Garage Sale" from 9 a.m. until 4 p.m. in the conference room across the hall from the Museum entrance, at 1310 Maple St. (southwest corner of 13th and Maple Streets), Golden, CO. "There will be a wide assortment of rocks and minerals by the flat, fossils, equipment, printed material, and miscellaneous items. Prices will drop by the hour." For further information please call 303-273-3815.

Apr. 7-24, Trace Fossils: Tracks, Trails, Burrows, and Bites ; a DMNS classroom course; by Greg McDonald, PhD, senior curator of natural history, Park Museum Management Program, National Park Service, and research associate, Earth Sciences Department.
"Ichthyology, or the study of trace fossils, is the analysis of biogenic structures in sediments or other substrates that were caused by living organisms. Trace fossils of tracks, trails, burrows, nests, and coprolites can provide evidence of behavior and activity. McDonald will present a general overview of trace fossils and lead a field trip to two well-known trace fossil localities: Dinosaur Ridge and the Fossil Trace Golf Course." Wednesdays, April 7–21, Classroom 202, Field trip: Saturday, April 24, \$110 member, \$140 nonmember. For more information see <http://www.dmns.org/learn/adults/classes-and-field-trips> .

Thurs., Apr. 8, Flatirons Mineral Club, Silent Auction; 7:00 pm, West Boulder Senior Center, 909 Arapahoe Ave. (just West of the Main Boulder Public Library), Boulder CO; all are welcome. (These mineral club silent auctions are a lot of fun and tend to be a good place to pick up rock, mineral, and fossil specimens at very reasonable prices.)

Thurs., Apr. 8, 7:00 p.m., Western Museum of Mining & Industry, Colorado Springs, Heritage Lecture Series: **Geothermal Energy**, by Charles Visser, National Renewable Energy Laboratories. There is no admission charge for this lecture series; call 719-488-0880 for complimentary reservations, or see <http://wmmi.org> for location and details.

Fri., April 9 - Silent Auction, North Jeffco Gem & Mineral Club: North Jeffco Senior Recreation Center at 6842 Wadsworth Blvd., Arvada. Setup begins at 5:30 pm; auction starts at 6:45 pm. “Free refreshments, free parking, free admission. Come check out our silent auction, buy or sell items and have an evening of fun.”

Sun., Apr. 11, Colorado's Changing Climate; 1:30 p.m., Lookout Mountain Nature Center, 910 Colorow Rd. Golden, CO, phone 720-497-7600; “Join Robert Thompson and Laura Strickland from the U.S. Geological Survey for a discussion on methods scientists use to unravel the history of climate changes in Colorado over the last 15,000 years and how these changes have affected ecosystems in the Colorado Mountains. Ages 13 – adult. This is a free program but registration is required. Please visit <http://lmnc.jeffco.us> to register.”

Sat., Apr. 17, Colorado Springs Mineralogical Society, Annual Silent Auction; to be held in the library of the Western Museum of Mining & Industry, Colorado Springs; 10 a.m. - 2 p.m. Anyone is welcome to attend, with payment of the regular museum entrance fee (CSMS club members, as museum affiliates, have complimentary admission). See the WMMI website for location and details.

Sun., Apr. 18, Earth Day Geology-Nature Hike on Green Mountain, Lakewood, CO (April 22 is the actual date of the 40th annual Earth Day). Led by USGS geologist Pete Modreski; all are welcome, no charge. Meet at the Alameda Parkway trailhead (opposite W. Florida Dr., about 1.7 miles west of Union Blvd.) to at 9 a.m. Bad weather alternate date will be April 25; to confirm the date or for more info, call 303-202-4766 or email pmodreski@usgs.gov. Be prepared for an approx. 4-mile round trip hike, climbing and descending about 600 feet to the summit and return.

Fri-Sat-Sun., Apr. 23-25, Spring Colorado Mineral and Fossil Show, at the Holiday Inn -- Denver Central, 4849 Bannock St. (Frontage road west side of I-25, just north of I-70); free admission and parking, 10 a.m.–6 p.m. Fri. & Sat., 10 a.m.–5 p.m. Sunday; many dealers with a variety of minerals, fossils, gems & jewelry.

Wed., Apr. 28, Friend of Dinosaur Ridge Fireside Chat: “**When Crocodiles Swam the Seaway**”, by Dan Fanelli; 7 - 8 p.m. in the Chevron Classroom (upstairs) at the Dinosaur Ridge Visitor Center, 16831 W. Alameda Parkway, Morrison CO; all are welcome, no charge.

Sat., May 1: first **Dinosaur Discovery Day** public tour day of the year, at Dinosaur Ridge, Morrison. This will be Cub Scout/Boy Scout Day; geology exhibits and hands-on dinosaur activities at the Visitor Center; expert guides at stops on the Dinosaur Ridge Trail. Activities suitable for scouts to earn the belt loop, academic pin and the Geology Merit Badge. Public is welcome (free). 10 am – 3 pm. Scouts must register. See www.dinoridge.org or call 303-697-3466 for more information.

Sat., May 15, **Friends of Mineralogy Silent Auction**, to be held at Clement Community Center, 1580 Yarrow St. (near Colfax & Wadsworth), Lakewood, noon to 3 p.m.

Sat.-Sun., June 26-27, "**Rock Fair**" at the Western Museum of Mining & Industry, Colorado Springs, co-sponsored by the Colorado Springs Mineralogical Society; a mini-mineral show with related activities, in tents outside the Museum. For more info see <http://wmmi.org/>.

Aug. 12-15, "**Contin-Tail**" mineral show and swap, Rodeo Grounds, Buena Vista, CO.

Aug 20-22, **Lake George Gem & Mineral Show**, Lake George, CO. For more info see <http://www.lggmclub.org/>.

Sep. 11-12, **Creede, Colorado, Mineral Field Symposium**, to be held in Creede, CO, sponsored by the Colorado Chapter, Friends of Mineralogy, and the Colorado School of Mines Geology Museum; a two-day symposium with lectures and field trips. More information will be available soon.

Sep. 17-18, **Denver Gem and Mineral Show**, Denver Merchandise Mart. For more info see <http://www.denvermineralshow.com/>. The theme of the 2010 show will be "The Creede Mining District".