



March 2010

# *Mining History News*

Quarterly Newsletter of the Mining History Association

## **Losses, Gains, and Our Yearly Gathering**

### **BOB SORGENFREI (1946 - 2010)**

When I heard the news of Bob Sorgenfrei's passing, I was shocked and saddened, as I know all of you were who knew him. In order to spread the word, I sent a brief email to all the MHA members in my computer's address book. I received back from these members a number of fond remembrances and kind words about our friend, and I want to share them with you.

Bob was the retired archivist at the Russell and Lyn Woods Archive at the Colorado School of Mines (CSM). MHA members remember him as "always kind and helpful to me," "a good friend," and "a dedicated officer of the MHA." Bob Spude recalled the time when Bob retrieved a copy of *de re Metallica* out of the vault for him so he could hold the 16th century original. When Mark and I were doing research in the CSM archive a number of years ago, Bob was very patient with our many questions, and very gracious about finding various documents for us.

I invite you all to bring your own stories of Bob Sorgenfrei to the Business Meeting at the conference in Silver City. We can spend a few minutes honoring his memory. If anyone is interested in a memorial to Bob Sorgenfrei, I think that donations to the Russell and Lyn Woods Archive at CSM would be much appreciated.

Bob, we will miss you.

### **BEQUEST FROM THE DR. FRANK LEWIS ORRELL, JR. ESTATE**

In January, MHA received a check for \$62,500 from the estate of the late Dr. Frank Lewis Orrell, Jr. There may be a small additional amount coming once the estate is finally settled. This gift more than doubles the total assets of the MHA.

It has been suggested that this money be used to create an endowment / foundation to assure the MHA's long-term stability. This and other ideas will be discussed at the Council meeting in Silver City. In the interim, the Treasurer, with agreement from the Budget and Finance Committee, has deposited the funds in an interest-bearing money market account.

### **COMPLEX GEOLOGY MEANS INTERESTING MINERALS IN NEW MEXICO**

The Silver City/Los Pinos/Central Mining District area in New Mexico is the site of our upcoming meeting in Silver City, New Mexico, from June 10-13, 2010. This newsletter contains a great deal of information about the events of this meeting, including registration information.

You will notice that there is a geology field trip on Saturday, so to introduce the area, and also to whet the curiosity of geologically-inclined MHA members, the following is a very brief discussion of the geology of the Silver City area.

Mineral production from this area of New Mexico has probably been greater than from any other area in the state, and includes iron, copper, lead, zinc, molybdenum, silver, gold and other minor metals, and is a direct result of the complex geology of the area. The Silver City area is located in a transition zone between the Colorado Plateau and the Basin and Range physiographic provinces.

The area has placer gold in streams near Pinos Altos, and silver outcrops in Silver City, but perhaps the most interesting geology in the area is that of the Central Mining District, which is highlighted in the box on the map (p. 2).

The Central Mining District is located about 10 miles east of Silver City, and includes the Santa Rita/Chino mine, to which there will be a field trip on Thursday and again on Saturday. The ores occur where late Cretaceous and Tertiary intrusions have altered and enriched Cretaceous and Paleozoic limestones. A stock is an igneous intrusive having a surface exposure less than 40 square miles, and there are three mineralized granitic stocks in the area: the Santa Rita, the Hanover-Fierro, and the Copper Flats. These stocks are largely responsible for the mineralization in this part of New Mexico. The Santa Rita stock, in which the Santa Rita mine is located, is a porphyry copper deposit. In addition to copper, the mineralization clustered around these 3 stocks includes iron, lead, zinc, and silver.

So, sign up for the field trips early, because with all this great geology to look at, seats may be hard to get!

--Karen Vendl, La Grange Park, IL

## Bob Sorgenfrei 1946-2010

Robert Sorgenfrei, 63, passed away Saturday, Jan. 23, 2010, in Golden, Colo. Bob lived an adventurous life and traveled the world. Upon graduation from UC Santa Barbara in the late 60s, he joined the Peace Corps and traveled to India. He went back to school and earned dual degrees in Anthropology and



*Bob at the MHA, 2005.  
(Photo by Johnny Johnsson)*

Archeology, and later his master's degree in Asian studies. He spoke both Japanese and Chinese fluently. Bob lived in Japan for years where he taught English to executives. He also worked for some of the finest museums and universities in the world with rare collections. He loved to hike and had scaled many mountains. His hardest journey was his last and dealt with years of chronic pain from a back injury. The pain is now gone and we know he is walking strong again in a high mountain meadow. Bob is survived by his loving wife, Judy of Golden; 92-year old parents, Bob and Ruth Sorgenfrei of Santa Maria; brother, John (Michele) and niece, Heidi of Pismo Beach.

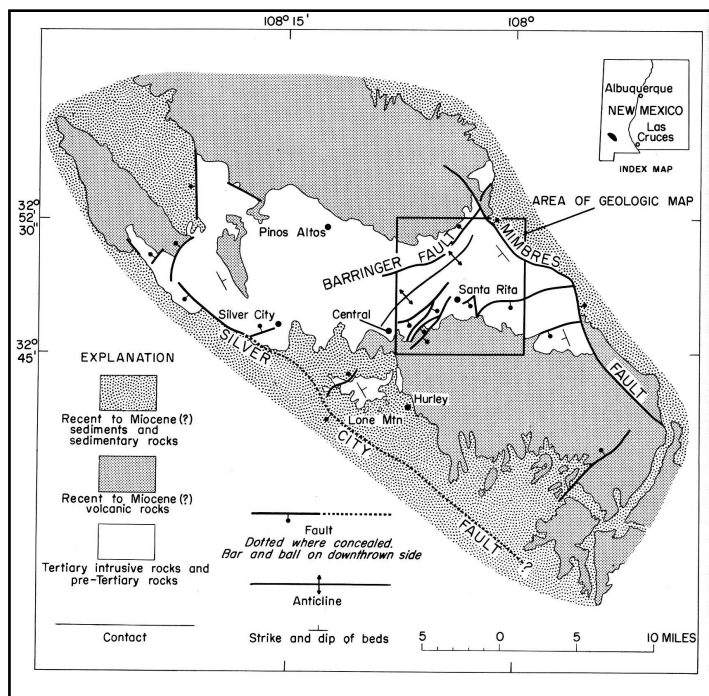
--San Luis Obispo Tribune, January 26, 2010

### MHA Dues Reminder

Please check the mailing label on the back of this newsletter. If 2010 is on the label, you have not paid your dues for this year -- please do so as quickly as possible. Thank you!

<b>General Membership:</b>	<b>\$25.00</b>
<b>International:</b>	<b>\$35.00</b>
<b>Sustaining Membership:</b>	<b>\$50.00</b>
<b>Patron Membership:</b>	<b>\$100.00</b>
<b>Corporate Member:</b>	<b>\$500.00</b>

**Diane Dudley, Membership Chair**  
**Mining History Association**  
 P.O. Box 552  
 Sedalia, CO 80135



*Geology of the Central Mining District and surrounding region.  
(Map from Herson and Jones (1968), p. 1214.)*

## 2010 Election Results

**Terms begin June 2010**

**President: David Wolff**

**Vice President/President Elect:  
Mark Langenfeld**

**Council: Bill Hawes, L. Mike Kaas**

**Nominating Committee: Eric Nystrom**

### NV Mining History Tip

The Nevada Bureau of Mines and Geology has compiled a new 2-page list of their publications and maps pertaining to Nevada mining history.

Their sales office in Reno can be accessed at (775) 682-8766, [nbmgsales@unr.edu](mailto:nbmgsales@unr.edu), or <http://www.nbmgsales.unr.edu>

--Peter Hahn, West Jordan, Utah

# Mining in Southwest New Mexico

Bob Spude, Terry Humble, and Chris Huggard

The history of mining in this corner of New Mexico is deeper and richer than any other region in the American West. Recent research pinpoints use by the American Indians of native copper from the outcrops; some suggest its manufacture into bells for trade. Spanish soldiers found the great Santa Rita del Cobre in the eighteenth century and it became part of a Royal mine grant in 1806, the last days of Spanish colonial dominion of the region. Sporadic mining occurred through the Mexican period, when copper was sent to the Chihuahua mint to be made into coins.

After the American acquisition of the region in 1848-1854, the southwest portion of New Mexico was the scene of a series of classic western mining rushes, starting with the gold strike at Pinos Altos in 1860. The mining camp was lifted right out of the California Mother Lode experience. This was followed by the discovery of silver, the biggest camp being located at what is now Silver City. Chloride Flat, Fleming and other satellite camps fed the growth of Silver City as the regional hub, political seat, and commercial center, especially after the arrival of the railroad in 1883. The 1880s were the peak years for the silver mining boom – at Shakespeare, Lake Valley, Georgetown, Hillsboro, Kingston, Alma, Mogollon, Chloride and other short-lived camps. The bust came with the financial panic of 1893.

Fortunately the revival occurred, especially after a young graduate from MIT, John Sully, proved that a large open pit copper mine could be dug at the Santa Rita del Cobre deposit. Sully's Chino Copper Company, backed by A.C. Burrage, Daniel Jackling and the Guggenheims, by 1912 was producing phenomenal amounts of copper at what has proven to be a multibillion dollar copper region. Santa Rita became one of New Mexico's biggest mining towns. The mill and later smelter at Hurley processed the ore—2010 was its centennial year. At nearby camps, like Tyrone, Hanover, Vanadium, and Fierro, more copper, lead, zinc, iron, and other metals poured forth.

From 1910 until 1970, major copper corporations mined at Santa Rita using open-pit mining technologies. In the 1920s, the Guggenheim's Kennecott Copper Corporation set its sights on the massive porphyry deposit, purchasing the Chino Mine in 1933. KCC inherited the company town of Santa Rita, whose 3,500 or so inhabitants lived in a segregated community made up principally of Mexican Americans (about 65%) and Anglo Americans. After the shutdown of the Great Depression, KCC decided to end the company town era and accepted that big labor in the form of the International Union of Mine, Mill, and Smelter Workers would be here to stay. Strikes did occur, though, the most famous being at the Empire Zinc company in the 1950s, the story retold in the movie "*Salt of the Earth*."

The results in the post-World War II period were the emergence of massive, new technologies, improved occupational conditions, and the rise of a generally affluent working "middle" class in New Mexico's most prosperous region. Mining brought sustained wealth to the communities of Grant County. Unfortunately, the growth of the pit did require the demise of Santa Rita town, whose site is now "up in space" above the bottom of the giant pit. Since the end of Santa Rita town in the 1970s, Kennecott, Phelps Dodge, and Freeport McMoRan have continued to mine and process copper to the tune of millions of pounds every year. Mining has been the most important economic endeavor in Grant County and the longest sustained in the entire state.

For over two centuries, southwest New Mexico has been one of the major mining regions of the West. In recent years, however, unstable markets and diminishing returns on ore have brought a halt (hopefully temporarily) at most of the major mines of the district including the Santa Rita/Chino open pit mine.

## AZ Museum Runs Mill

The State of Arizona plans to transform the Arizona Mining and Mineral Museum into a general state history museum over the next two years, relegating mining to only a portion of the exhibits. In recognition that these looming changes may impact the outdoor displays, museum volunteers will run the 1890s stamp mill, mucker, and other historic equipment on the second Saturday of each month. The first demonstration will be Saturday, March 13, from 11 to 2 pm. The Arizona Mining and Mineral Museum is located at 1502 W. Washington in Phoenix. The opportunity to see an operating stamp mill and other equipment may be lost due to these future changes, so make plans to see them while you can.

## Mining History "Down Under"

The **Australian Mining History Association** has established a new website. Anyone interested in the mining history of Australia and New Zealand, and the bibliography of Australasian mining history should consult the site. It also includes a link to the AMHA annual conference to be held in New Zealand in July. The new AMHA website link is:

<http://www.mininghistory.asn.au>

# Silver City Conference Information

## Venue Details

The **Silver City Museum** is our host for the first day of the conference, Thursday June 10, with meetings, tours, and receptions based there. It is located at 312 W. Broadway in downtown. The museum is the former home of mining man Henry Ailman. The museum displays and interprets the history of Silver City and Grant County with much on mining; it will be open during the conference and invites all members to take advantage of its research collections (please let them know ahead of time) as well as their gift shop and book store (the best in town). The opening reception Thursday eve will be held on the grounds of the museum, which will be open for conference participants. The board meeting will be in the Annex adjacent the museum. A Mining District History bus tour leaves from the museum Thursday afternoon as does the Friday morning walking tour for spouses.

The Friday-Saturday conference paper sessions will be at the **Global Resource Center on the campus of Western New Mexico University**, a short drive from the Silver City Museum. The Global Resource Center is a state of the art facility. Registration and vendors will be in the lobby area while most of the sessions will be in the new auditorium. The presidential banquet will be in an adjacent room at the center. Parking is behind the center. The university campus also houses a museum in the Fleming Hall, a brisk walk from the center. It houses one of the best collections of Mimbres pottery, as well as regional history collections. Saturday afternoon bus tours will leave from the Global Resource Center. The Global Resource Center is #4 and Fleming Hall is #13 on the official WNMU campus map, available online:

[http://www.wnmu.edu/quickfacts/WNMU\\_map.pdf](http://www.wnmu.edu/quickfacts/WNMU_map.pdf)

Our annual banquet Friday night will be at the **Red Barn Restaurant** on the northern edge of downtown, at 780 US Hwy 180. Unfortunately the Buckhorn Restaurant at Pinos Altos was under renovations during the planning of the conference, but MHAers looking for a dinner experience for any other night may find it open (we will know by June). After the MHA business meeting on Saturday at the **Silco Theater**, and dinner on your own, we will host the

showing of the movie *Salt of the Earth*. The Silco Theater is a historic theater on Bullard St. in the heart of downtown.

## Lodging

There is no conference hotel, but there are a large number of hotels in Silver City. Accommodations vary, including bed and breakfasts in historic homes, historic hotels, older motels, and the usual chain motels. Near the Silver City Museum are the Palace Hotel and the Inn on Broadway B & B, near the heart of downtown. There is not a hotel near the university campus, but a short drive away and in town along U. S. 180 are the older motels, the Copper Manor and the Drifter, and, starting just east of them coming into town, are the Comfort Inn, Econo-Lodge, Super 8, Motel 6, Holiday Inn Express, and others. The Red Barn restaurant, our Friday banquet venue, is adjacent to the Copper Manor and across the street from the Drifter. Lodging info can be found on the city web page: [www.silvercity.org](http://www.silvercity.org)

## Registration

Our registration desk will open after lunch on Thursday at the Silver City Museum Annex, adjacent the museum. Parking is behind the museum and annex. The registration desk will move Friday morning to the Global Resource Center lobby, Western New Mexico University campus, and will remain there through Saturday morning. Parking is behind the center. A registration form is included with this newsletter -- please fill it out and mail it in by May 10. You can also register at the desk during open hours as well as pick-up your pre-registration conference packets, name tag, tour and meal tickets.

## General Information

The weather in the southwest is hot in June. Fortunately Silver City at an elevation of nearly 6,000 feet at the edge of the pine forest is cooler than the lower desert – we hope for temperatures in the 80s but expect the 90s. Dress is casual and comfortable especially for tours/field trips. Have extra water at hand as well as snacks. Be aware that some of the tours may encounter cactus or insects that have a nasty bite. Please don't wander off from tours because you just may find a resident rattlesnake.

# Optional Conference Tours

**Note: All tours are on a first come first served basis. Seating will be limited because of the bus size, so please make your reservations early.**

## Thursday Half-Day Mining District Historical Tour

- pre-conference tour
- \$15 fee
- includes bus transport
- guided by local historian Terry Humble

The bus departs from and returns to the Silver City Museum. Terry will give some history of the local underground mines of Vanadium, Hanover and Santa Rita. One of the stops will view the Empire Zinc mine, site of the strike retold in the movie *Salt of the Earth* (to be shown Saturday night at the Silco Theatre). A stop at the Chino Mines open pit overlook is also scheduled. This is the site of the famed Santa Rita del Cobre, a multibillion dollar copper producer.

## Friday Walking Tour of Silver City

- optional tour during MHA program
- \$5 fee
- guided by Silver City Museum docent

The walking tour is geared for spouses interested in seeing some of the historic downtown as well as the shops and art district. The walking tour departs from and returns to the Silver City Museum Gift Shop. The replica Billy the Kid home and the site of Madam Millie's House will be pointed out. Post-tour restaurant/lunch suggestions will be made.

## Saturday Half-Day Tours (described below)

*Tour #1: Mining District Historical Tour*

**or**

*Tour #2: Geology of the Silver City Region*

Because both tours operate at the same time, it is suggested MHAers who arrive early take the pre-conference Thursday Half-Day Mining District Historical Tour and then take the Saturday Half-Day Geology Tour.

## Saturday Half-Day Tour #1: Mining District Historical Tour

- 1 of 2 Saturday Tour Options
- \$15 fee
- includes bus transport
- guided Terry Humble and Larry Crofts of Cobre Mines

Tour 1 will leave from and return to the Global Resource Center at WNMU. Terry will give some local history of the region from the Spanish colonial era to today, with a stop at the famed Santa Rita del Cobre, now the Chino Mines open pit, the multibillion dollar copper producer.

The bus will visit mines in Vanadium, Hanover and Santa Rita, including site stops at the Bullfrog mine and the Empire Zinc mine, courtesy of Cobre Mines. The latter stop is the site of the strike retold in the movie *Salt of the Earth* (to be shown Saturday night at the Silco Theater).

## Saturday Half-Day Tour #2: Geology of the Silver City Region

- 1 of 2 Saturday Tour Options
- \$15 fee
- includes bus transport
- guided by Virgil Lueth, of New Mexico Bureau of Geology and Mineral Resources and co-editor of *Geology of the Gila Wilderness-Silver City Area*.

Tour 2 will also leave from and return to the Global Resource Center at WNMU. Tour 2 will be a tour with some short hikes of the varied geology of the Pinos Altos Range-Burro Mountains-Silver City Range with emphasis on the gold, silver, and copper economic geology of the district.

## Sunday All-Day Tour to the boom and bust camps of the Black Range

- post-conference tour
- \$65 fee
- includes bus transport and lunch
- guided by Bob Spude and Terry Humble

Buses will leave from and return to the Silver City Museum. The bus will cross the Black Range with a stop at the Emery Pass overlook to get the lay of the land. From the pass the bus drops to the Chihuahua desert camp of Lake Valley. The 1880s bonanza camp now ghost town is managed by the Bureau of Land Management and the BLM's resident ghost will tour us from the old Lake Valley school visitor center to the empty false fronted businesses and around the mines and ruins. The Bridal Chamber silver deposit is considered one of the richest finds in the West. Next stop is Hillsboro, one time county seat and gold camp now pleasant village on the banks of the cottonwood-lined Percha Creek. Lunch will be served and MHAers will be on their own to either eat under the cottonwoods or follow a self-guided walking tour of the ruins and one block downtown. We will stop at the Black Range Museum, one time hotel of madam Sadie Orchard. Back on the bus the trip will include "drive-by" stops at the mines and placer fields before the stop at Kingston. From Kingston we will return back over the cool pines of the Black Range to Silver City.

## Getting to Silver City (and Having Fun Along the Way)

The nearest major airports to Silver City are at El Paso, Albuquerque or Tucson. Each has rental car companies for those who choose to fly into the area and to drive the four to five hours to Silver City. If you drive east on I-10 from Tucson you might want to make a side trip to the former silver camp of Tombstone. The “Town Too Tough to Die” is geared for the tourist, but must see sites are the Tombstone Courthouse State Park and the Goodenough Mine Tour – ask the tour guide to see the ‘death cookie.’ If you have time swing south through the former copper camp of Bisbee and smelter town of Douglas, which are well worth the diversion before heading back northeast to I-10. South off I-10 at Lordsburg is the ghost town of Shakespeare, that, if open, is also a must see (you can google all these site names and get much information in order to plan your visit). The drive from Lordsburg to Silver City is scenic once you enter the rolling Burro Mountains. Look for the Tyrone open pit as you near Silver City on highway 90. An overlook provides a view of their reclamation efforts.

From El Paso, head out on I-10 west, past the old ASARCO smelter and the broad emptiness of the Chihuahua desert to New Mexico. A stop at Mesilla for lunch on the historic plaza is worthwhile – sorry, no mining history but plenty of Wild West history, of the Butterfield Stage, Billy the Kid and more. Continue heading west on I-10 to Deming. The Luna-Mimbres museum there is worth a visit – it has a good collection of items about local history, including information about Pancho Villa’s attack on the U.S. Highway 180 to Silver

City heads northwest from Deming over more of the flat Chihuahua desert until you hit Hurley, the one-time mill town for the Chino operation. You’re in mining country from there to Silver City, areas we will be touring during the conference.

From Albuquerque head south on I-25 for more long, boring driving through the Chihuahua desert. Get off about an hour south at Socorro and scoot over to New Mexico Tech to visit the mineral museum and say hi to the good folks at the New Mexico Bureau of Geology and Mineral Resources. You can take the wonderful but lengthy back road to Silver City by heading west on US 60 through the Magdalena-Kelly mining region, on through the vast grass-covered San Augustine Plain, and then around Reserve to south along the forested New Mexico line and then down the backside of the scenic Mogollon Range. Past the roadside village of Alma take a side trip up the steep paved narrow winding highway to the ghost town of Mogollon, considered the Real McCoy, one of the best ghost towns in the West (with a half dozen residents). If you don’t have the time to go this route to Silver City, instead at Socorro get back on the I-25 freeway headed south through more of the vast (boring) Chihuahua desert to just past Truth or Consequences to the state route 152 through Hillsboro and Kingston (which we will tour), over the scenic forested Black Range, and down into the spectacular Santa Rita-Silver City mining country. Hope to see everyone in town for the Thursday afternoon tour, if not then, we’ll see you Thursday eve at the reception with our hosts at the Silver City Museum. *Vaya con dios, amigos.*

### Please Consider Volunteering as MHA Secretary

Dawn Bunyak, who has served us as Secretary since 2004, is stepping down, and the MHA is still looking for a volunteer to fill Dawn's shoes. The MHA Secretary keeps the official minutes, counts election ballots, and otherwise attends to the good administrative health of our society. (Complete duties are spelled out in the bylaws.)

The MHA depends on volunteers like you! If you are interested in serving as the MHA Secretary, please contact President Karen Vendl, [mkvendl@earthlink.net](mailto:mkvendl@earthlink.net)

# Geological and Historical Perspectives on Turquoise

D. D. Trent

The 2010 meeting of the Mining History Association will be held in Silver City, New Mexico. Historically, New Mexico has been an important source of turquoise beginning perhaps as long as 26 centuries ago. For that reason, MHA members may find the following short paper of interest.

The word turquoise comes from the French word *turquie* for the country Turkey, as the original stones arrived in Europe through Turkey from Persia. Turquoise is a hydrous phosphate of copper and aluminum,  $\text{CuAl}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 2\text{H}_2\text{O}$  for those who like chemical formulae, with the small amount of copper (Cu) imparting the desirable blue color. Trace amounts of ferric iron can substitute for aluminum in which case the color becomes green. Chrysocolla, a hydrous copper silicate mineral of similar color, is easily confused with turquoise, but turquoise is harder, usually about 6 on Mohs' hardness scale, whereas chrysocolla is softer, ranging from 2 to 4.

Turquoise seems to be most common in arid climates, such as the Old World deposits of the Sinai Peninsula where it was mined as early as 3200 BCE, and in the American southwest. It is a secondary mineral, formed by surface water percolating downward through cracks and fissures in rocks containing copper minerals and the mineral apatite,  $\text{Ca}_5(\text{F,Cl,OH})(\text{PO}_4)_3$ , the source of the phosphate. It usually forms as small veinlets and stringers cutting through weathered and somewhat decomposed volcanic rocks.

Turquoise may vary in color from a bright, electric blue to pale blue to sea-green. An unusual variety, spider web turquoise, is laced with a network of thin chestnut-brown veinlets cutting through the blue turquoise. It is highly esteemed and occurs at various localities in the southwestern US, Colorado, New Mexico, Nevada, and Arizona, especially Bisbee and Morenci. Crystals of turquoise are extremely rare, and thus are highly valued. Spectacular microcrystals occur in schist and quartz near Lynch Station in Campbell County, Virginia. Turquoise is found in Iraq (Persia), and also Russia, Germany, and

France. In California, turquoise has been mined in San Bernardino County at several sites around Turquoise Mountain, north of Halloran Springs off I-15. I have identified thin veins of turquoise at one of the historic mines in Joshua Tree National Park.

Many of you reading this are probably familiar with turquoise jewelry, perhaps those pieces crafted by Zuni or Navajo jewelers. Such interest in using turquoise for adornment is nothing new, as turquoise jewelry dates back to antiquity. In ancient times it was mined on the Sinai Peninsula some 7000 years ago and was used for adornment in that region. Interestingly, it was not used by the ancient Greeks or Romans. Beginning in the Middle Ages the fine-quality robin's egg blue turquoise of Persia was mined and exported, and between 1766 BCE and 221 CE Chinese turquoise was worked into stunning artistic pieces used by royalty.

In the New World, the Indians of South America made little use of turquoise, in spite of the many enormous copper deposits (with which turquoise is commonly associated) in Chile and elsewhere. In present-day Mexico, however, Aztecs used turquoise for gems, and crafted inlaid ritual objects for ceremonial use. The source of the Aztec turquoise was from Arizona and New Mexico where it was mined by Indians. Many turquoise artifacts have been found at an Aztec site at Alta Vista, near Mexico City, that date to 700 CE. Neutron activation techniques used to analyze the chemical "fingerprint" of this Aztec turquoise reveal that the major source was from the Cerrillos mining district, southwest of present-day Santa Fe, New Mexico. Thus it appears that Cerrillos turquoise was mined at least 1300 years ago. Furthermore, the earliest evidence of turquoise as a gem appears to be from a burial site in the state of Guerrero, Mexico, which is archaeologically dated to 600 BCE. Should this turquoise prove to be from the Cerrillos area in New Mexico as well, it would push the date of mining back 26 centuries and make the Cerrillos district the site of the earliest known mining in North America.

## Attention Conference Vendors

Tables are available for selling books and merchandise during the conference. The cost is \$25.

For further details or to reserve a spot, contact conference organizer Bob Spude:

[spudes@msn.com](mailto:spudes@msn.com)

# Mining History Association

## Annual Meeting June 10-13, 2010

### Silver City, New Mexico

#### THURSDAY JUNE 10

- 8:30-11:30 MHA Board meeting, Silver City Museum Annex  
 10:00-5:00 Registration, Silver City Museum Annex, lobby  
 10:00-11:30 MHA Editorial Board meeting, Silver City Museum Annex  
 Noon Lunch on your own.  
 1:00-5:00 Preconference Santa Rita/Chino Tour departs from Silver City Museum  
 6:00-8:00 Welcoming Reception at the Silver City Museum

Dinner on your own—enjoy downtown Silver City

#### FRIDAY JUNE 11

- 8:00-5:00 Registration, Global Resource Center lobby, WNMU
- 10:00-11:30 Walking Tour for Spouses. Start from Silver City Museum.
- 8:30-9:00 Session 1: Plenary Session  
 Welcome: **Karen Vendl**, MHA President 2009-2010  
**Bob Spude and Chris Huggard**, *What to Expect at the Conference*  
**Susan Berry**, *The Silver City Museum*
- 9:05-10:15 Session 2: Mining New Mexico  
 Chair: **Jay Fell**  
**Terry McNulty**, *A Brief History of the Bullfrog Mine & Mill at Vanadium, New Mexico*  
**Larry M. Southwick**, *When is a Gold Mine Not a Gold Mine? When it Contains Zinc*  
**Jack W. Burgess**, *The Kearney Mine, Grant County, New Mexico, 1942-1967*
- 10:30-12:00 Session 3: Mining Frontiers, Engineers, and the World  
 Chair: **Karen Vendl**  
**Richard Francaviglia**, *The Treasures of Aladdin: Orientalizing the Mining Frontier*  
**Jeremy Mouat**, *One of the Best-Known Mining Men in California and the West: The Long and Unusual Career of George D. Roberts, 1828-1901*  
**Robert L. Spude**, *E. B. Gage and the Carlisle Mine Promotion*  
**Greg Drew**, *The Significance of the Proposed Australian Cornish Mining Heritage Site -- Burra Moonta Mines*
- 12:00-1:30 Lunch on your own; WNMU Museum in Fleming Hall open
- 1:45-3:00 Session 4: Mining and Environmental Issues  
 Chair: **Chris Huggard**  
**Dan Bench**, *Short Course on PCBs in Mines*  
**Jason Corbett**, *Bats and Abandoned Mines: Echoes of the Past and Wing beats of the Future*  
**Karmen King**, *The Curve Continues to Turn*



3:15-4:30 Session 5: Mining and Mining Memory in the Southwest and Mexico  
 Chair: **Duane A. Smith**  
**William Culver**, *James Douglas' Mexico Reports*  
**Gilbert S. Arizaga**, *The Empire Zinc Strike and the Emergence of La Gente de Grant County, 1950-1970*  
**Bob Hartzell**, *The National Mining Hall of Fame and Museum from the Inside Out*  
**Heinrich Wenning**, *Financial Art and History on Old New Mexican Mining Documents*

5:30-9:00 MHA Reception and Awards Banquet, Red Barn Restaurant  
 Featured Speaker: **Chris Huggard**, with the assistance of **Terry Humble**, *Santa Rita del Cobre: A Narrative and Photograph History of a Copper Mining Community in New Mexico*

## SATURDAY JUNE 12

8:00-11:30 Registration, Global Resource Center lobby, WNMU

8:30-9:45 Session 6: Seeing and Displaying Mining Landscapes  
 Chair: **Jeremy Mouat**  
**Brian Leech**, *Downturn and Disaster: A History of How Residents and Visitors in Butte, Montana Viewed the Mining Landscape*  
**Sarah Grossman**, *Seeing Like an Engineer*  
**Eric Nystrom**, *Mining Landscapes on Display in the U.S. National Museum, 1880-1930*

10:00-11:30 Session 7: Mining Towns, Memories, and Laws  
 Chair: **Eric Clements**  
**Rick Hendricks**, *Sofio Henkle and the Early History of the Hanover Mines*  
**James Warren Andrews**, *American Mining Law Apex Decisions*  
**Sheila Kelly**, *A Mining Camp with a Country Club? Growing up in Treadwell, Alaska, a Unique Company Town*  
**Rudy Davison**, *Preservation and Restoration of the Kennecott Mill and Mine Ruins in Wrangell-St. Elias National Park from 1938 to 2009*

11:45-1:30 Presidential Luncheon, Global Resource Center, WNMU  
 Passing of the Presidential Rock Pick: **Karen Vendl**, MHA President 2009-2010  
**David Wolff**, MHA President 2010-2011  
 Presidential Lecture: *Mining History from a Black Hills Perspective*

1:30-5:00 Tours -- Tour buses leave from Global Resources Center, WNMU  
 1) Santa Rita/Chino tour  
 2) Geology tour of the Silver City-Santa Rita region

5:30-6:00 MHA Business Meeting, Silco Theater (open to all members)  
 Following the meeting the theater will be available for a members' "show and tell" session – bring your images on CDs.

6:00-8:00 Dinner on your own

8:00-10:00 Showing of film "Salt of the Earth" (1954) Silco Theater  
 Introductory remarks by **Terry Humble** on the strike and its aftermath

## SUNDAY JUNE 13

Optional All-day Bus Tour: departs from Silver City Museum

Tour to the near-ghost camps of the Black Range boom: Lake Valley, Hillsboro, and Kingston. Lunch included.

# Readings on Silver City Area Mining History

Compiled by Bob Spude

Alexander, Bob. *Six-Guns and Single-Jacks, a History of Silver City and Southwestern New Mexico* (Silver City: Gila Books, 2005). Hell-bent for leather wild west tales of Silver City with some mining; a fun read.

Baker, Ellen. *On Strike and On Film: Mexican American Families and Blacklisted Filmmakers in Cold War America* (Chapel Hill: The University of North Carolina Press, 2007). Discusses the movie "Salt of the Earth."

Berry, Susan and Sharman Apt Russell. *Built to Last: An Architectural History of Silver City, New Mexico* (Silver City: Silver City Museum, 1995). History of the town and the architecture that mining built.

Christiansen, Paige W. *The Story of Mining in New Mexico* (Socorro: New Mexico Bureau of Mines & Mineral Resources, 1974). The standard overview of New Mexico's mining history by respected New Mexico Tech prof.

Evans, Max, intro by Andrew Gulliford, with epilogue by Susan Berry. *Madam Millie: Bordellos from Silver City to Ketchikan* (Albuquerque: University of New Mexico Press, 2004). A revealing account by one of Silver City's many illustrious characters.

Gomez, Arthur R. "Mining New Mexico: A Photographic Essay," *New Mexico Historical Review* 69, no. 4 (Oct. 1994): 357-368.

Huggard, Christopher J. "Copper Mining in Grant County, 1900-1945," in Judith Boyce DeMark, *Essays in Twentieth-Century New Mexico History* (Albuquerque: University of New Mexico Press, 1994). History of the Chino and Tyrone copper mines and their impact on the Silver City area; presently being expanded into book length treatment.

Huggard, Christopher J. "The Impact of Mining on the Environment of Grant County, New Mexico to 1910," *Mining History Journal* 1 (1994): 3-8. Good overview of 19th century mining in the Silver City region in the context of environmental impacts.

Huggard, Christopher J. "Mining and the Environment: The Clean Air Issue in New Mexico, 1960-1980." *New Mexico Historical Review* 69, no. 4 (Oct. 1994): 369-388.

Huggard, Christopher J. "Reading the Landscape: Phelps Dodge's Tyrone, New Mexico, in Time and Space," *Journal of the West* 35, no. 4 (Oct. 1996): 29-39.

Humble, Terrence M. "The Pinder Slip Mining Claim Dispute of Santa Rita, New Mexico, 1881-1912," *Mining History Journal* 3 (1996): 90-100. Classic mining dispute over a jumped claim, a saloon owner, and the great Santa Rita mine owners.

Jones, Paul M. *Memories of Santa Rita* (self-published, 1985). Personal reminiscence of growing up in Santa Rita and working at Chino.

King, Patsy Crow. *Sadie Orchard: the Time of Her Life* (El Paso: PDX Printing, 2006). Kingston and Hillsboro's famous hotel keeper, stage operator, and madam.

Lorence, James J. *The Suppression of 'Salt of the Earth: How Hollywood, Big Labor, and Politicians Blacklisted a Movie in Cold War America* (Albuquerque: University of New Mexico Press, 1999).

Lundwall, Helen J., ed. *Pioneering in Territorial Silver City: H. B. Ailman's Recollections of Silver City and the Southwest, 1871-1892* (Albuquerque: University of New Mexico Press, 1983). Silver prospector, miner, and later successful businessman from boom to bust; his home is now the Silver City Museum.

Mack, Greg H., James C. Witcher, and Virgil W. Leuth, eds. *Geology of the Gila Wilderness-Silver City Area: New Mexico Geological Society Fifty-ninth Annual Field Conference, October 23-25, 2008* (Socorro: New Mexico Geological Society, 2008).

McKenna, James A. *Black Range Tales* (1936; reprint, Glorieta, NM: Rio Grande Press, 1991). Classic reminiscence of a miner's life during the 1880s boom at Kingston, Hillsboro, and Lake Valley.

Milford, Homer E. "History of the Lake Valley Mining District" (Santa Fe: New Mexico Mining and Minerals Division, 2000). History of the bonanza camp now ghost town, with revelations on mining frauds.

Simmons, Marc. *Massacre on the Lordsburg Road: a Tragedy of the Apache Wars* (College Station: Texas A&M University Press, 1997). Prominent Silver City resident's fate as well as much on the 1880s regional history.

Spude, Robert L., "The Santa Rita del Cobre, New Mexico; the Early American Period, 1846-1886," *Mining History Journal* 6 (1999): 8-38. Early years of speculative mining at the now large open pit copper mine.

# MHA 2010 Conference Registration Form

## Silver City, New Mexico -- June 10-13, 2010

Your Name (for badge): \_\_\_\_\_

Spouse Name (for badge): \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/State/Zip/Country: \_\_\_\_\_

Email / Telephone: \_\_\_\_\_

Please list me in the conference packet

I am a current member (2010 on mailing label)

Event	Cost per Attendee	Number Attending	Total per Event
Conference Registration: <b>Members = \$50, Non-Members = \$55, Spouse = \$5, Single Day = \$25</b>	<b>\$50 / \$55</b> \$5 / \$25		
MHA Annual Membership (U.S. / International)	\$25 / \$35		
Thursday Half Day Mining District Historic Tour	\$15		
Thursday Reception (no charge; need numbers)	free		
Friday Morning Walking Tour for Spouses	\$5		
Friday Evening Banquet ( <b>circle choice</b> ): beef brisket / lemon chicken / red chili beef enchilada	\$25		
Saturday Presidential Luncheon	\$17		
Saturday Afternoon Area Tours ( <b>circle one</b> ): Tour 1: Mining History; Tour 2: Regional Geology	\$15		
Saturday Night Movie (no charge; need numbers)	free		
Sunday All-Day Tour to the Black Range (includes lunch)	\$65		
<b>Total Payment</b>			

Make checks payable to: **Mining History Association**  
(payments in U.S. dollars; Credit Cards **not** accepted)  
Mail completed registration form and payment **by May 10** to:

**MHA Silver City 2010**  
**c/o Bob Spude**  
**7 Avenida Vista Grande #145**  
**Santa Fe, NM 87508**

For additional conference information contact Bob Spude:  
505-466-1476 (cell 505-577-2648)  
**spudes@msn.com**

*Mining History Association*  
P.O. Box 552  
Sedalia, CO 80135

## **First Class Mail**

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### **Upcoming Events**

#### **21st Mining History Association Conference**

June 10-13, 2010

Silver City, NM

<http://www.mininghistoryassociation.org>

#### **16th Australian Mining History Association Conference**

July 7-10, 2010

Greymouth, New Zealand

<http://www.amha.asn.au>

#### **50th Western History Association Conference**

October 13-16, 2010

Incline Village (Lake Tahoe), NV

<http://www.westernhistoryassociation.org>

#### **22nd Mining History Association Conference**

June 1-5, 2011

Dillon, MT

The *Mining History News* is published quarterly by the Mining History Association. It is sent to MHA members who also receive the annual *Mining History Journal*. MHA is an organization of individuals interested in the history of mining and metallurgy. Submissions for the newsletter are encouraged and should be sent to Eric Nystrom at the MHA address or by email: [eric.nystrom@rit.edu](mailto:eric.nystrom@rit.edu).

Deadlines:    March issue: February 15  
                  June issue: May 15  
                  September issue: August 15  
                  December issue: November 15

Change of Address: Please send all address changes to Diane Dudley, Membership Chair, at:

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