



Spring 2011

Mining History News

Quarterly Newsletter of the Mining History Association

Montana Ramblings

On to Montana! Montana or Bust! It's great to return to the "Treasure State." Ironically, for a place called the Treasure State, the Mining History Association has only held one other meeting here, the 2001 conference in Butte. That lone gathering stands in stark contrast to the six annual meetings we have had in Colorado. Nevertheless, it is good to get back. Montana has a wonderful variety of mining sites, including gold, silver, copper, lead, platinum, talc, vermiculite, and coal. The state's nickname is very appropriate.

I have many fond memories of exploring Montana. Some of these recollections come from our 2001 gathering. Events that stand out include walking the Lexington Tunnel in Butte, visiting the smelter sites at Anaconda, and drinking a beer at Club Moderne in Anaconda. In fact, I still display on my bookshelf the piece of tile that I picked up at the base of the great Anaconda smoke stack. Coming and going from MHA conventions in Wallace, Idaho and Rossland, British Columbia also gave me time to stop in Montana. During these trips, I visited mines across the state, from the Judith Mountains in the central part to the hills above Pony, midway between Bozeman and Butte, just to name a few stops. One particularly poignant moment came at the Smith coal mine, a short distance from Red Lodge. In 1943, 74 men died in a mine explosion. Coal production soon ended, but the mine plant still stands (or was standing when I visited) as a stark reminder.

Ron Limbaugh and Bill Culver have planned some excellent tours for this year's convention,

and although I have already been to most of the places, I still look forward to seeing them again and hearing what local experts have to say. While I will go to Alder Gulch with the Sunday tour, I can heartily recommend the other trip to Granite. I went there with the Montana chapter of the Society for Industrial Archaeology in 1997 and was very impressed. The moral of this story is to take the opportunity of this convention to tour the Treasure State far and wide, to ramble some.

Beyond having great places to visit, Montana offers us a chance to reflect on western gold rush history. While gold was first noticed in Montana in 1852, the important discoveries were made in 1862 along Grasshopper Creek and at Bannack, followed by Alder Gulch. With the mining ground in California, Nevada, Colorado, and Idaho mostly taken, western mining men jumped at the chance to find new riches, and they brought the techniques, experiences, and names (Virginia City and Nevada City) that made Montana a success. But others from the East, wishing to escape the Civil War or just wanting to seek wealth for the first time, also came.

Mineral rushes then should be viewed as a succession of events, each building on the other. When the Black Hills rush came along in 1875, the most prominent participants came from Montana. Men from Montana established the early gold camp of Montana City and developed the agricultural land around Spearfish. Then Deadwood's leaders came from Montana. James K. P. Miller moved to Montana in 1865, and then to Deadwood in 1876. As a Deadwood developer

"Montana Ramblings..." (continued on page 2)

"Montana Ramblings..." (continued from page 1)

he built the Deadwood Central Railroad and established the Deadwood and Delaware Smelter, a significant addition to treating area ores. Seth Bullock showed up in Montana in 1867 and also came to Deadwood in 1876, becoming the area's first sheriff and president of a nearby silver mining company.

I shall close with a couple of final ramblings. Butte is probably Montana's most significant mining town, and Dale Martin of Bozeman has developed a different perspective on mining history while spreading what he calls the "Gospel of Butte." He provided the following: "With data from the 1990s, all the copper mined in Butte would form a cube about 340 feet high/wide/thick; each face of the cube would have an area of about 2.65 acres. For silver, the cube would be 42 feet high/wide/thick. For zinc and manganese, respectively, cubes with edges of 222 feet and 200 feet."

Finally, if your conference travels (ramblings) take you by Deadwood on June 16, please stop by the Homestake-Adams Research and Cultural Center. The center will be celebrating its grand opening, and you can see the mining history it has to offer. We shall have a celebratory beverage together!

Best wishes, safe travels, and see you in Dillon!

David A. Wolff
Spearfish, SD

South Africa IMHC Scheduled for 2012

The 9th International Mining History Congress (IMHC) will be held in Johannesburg, South Africa, April 17-20, 2012. It had originally been tentatively slated for this year. The Congress, which brings together mining historians from across the globe, will follow on the success of earlier IMHC meetings, including Cornwall in 2009 and India in 2007. For further details, contact organizer Richard Bailey:

richard@imhc.co.za

Mining Claim Ledgers Donated to Cripple Creek District Museum

The Cripple Creek District Museum in the historic mining town of the same name in Colorado recently received an important donation of early mining and property records. The Ute Pass Historical Society in Woodland Park, Colorado, donated more than 70 historical registers ranging in date from 1861 to 1899. These ledgers document all of the mining claims in the Cripple Creek District up to 1899, and also hold land history and ownership records dating more than a decade before Colorado's 1876 statehood.

"We are very indebted to the Ute Pass Historical Society for the good care they have taken of the ledgers, their conscientious documentation of the information therein, and especially for placing them with the Cripple Creek District Museum for future generations to enjoy," declared Jan Collins, Museum Director.

WMMI Receives Grant to Provide School Tours

The Western Museum of Mining & Industry, a private, non-profit mining museum located in Colorado Springs, received a \$1,000 grant from Colorado Springs Utilities Community Focus Fund. Funds will be used to help to support the K-12 School Tour Program, which provides over 110 schools hands-on learning experiences that strive to meet the Colorado State Department of Education Curricula Standards.

In 1977, the first full year of tour operations, the Western Museum of Mining & Industry's education program provided over 1,260 children with knowledge of American history and their relationship to the earth and the environment, especially in terms of the mining profession. This year the program anticipates over 8,000 school children will directly benefit from experiencing this curriculum-based program.

"The Community Focus Fund's commitment to providing support to arts and culture has been essential to the museum's ability to inspire the next geologist, teacher, or engineer," said David Carroll, Executive Director of the museum.

The Colorado Springs Community Focus Fund is a community outreach program that provides financial support to local educational and nonprofit organizations in support of projects that benefit the community and promote volunteerism.

Mining History and More as the MHA Looks Forward to Dillon

The Mining History Association will meet in Dillon at the University of Montana Western. This picturesque campus, with its Victorian Main Hall, began in 1895 as the State Normal School. MHA sessions will be held in the Swysgood Technology Center (STC) Great Room, a facility with all the latest audio-visual equipment. The Presidential luncheon and banquet will be hosted in the Lewis and Clark Room in nearby Mathews Hall.

Dillon is 5 1/2 hours from Salt Lake City, 2 hours from Helena, and 1 hour from Butte. Interstate 15 passes through Dillon on its way to Butte and Helena from Salt Lake. The closest large airports are at Helena and Bozeman, both two hours away by automobile. Both routes pass through mining country we will visit on Sunday, either on the bus trip to Silver Star, or the caravan tour to Philipsburg.

The city of Dillon strides the Beaverhead River, which flows north through town on its way to the Jefferson River. The Jefferson, in turn, merges with the Madison and Gallatin at Three Forks to form the headwaters of the Missouri River. Lewis and Clark came this way in 1805, exploring the area for possible routes to the Pacific and naming Beaverhead Rock, a distinctive local landmark. The Beaverhead River, a fine fishing stream, and its tributaries attract anglers from a wide area.

Dillon began in 1880 as a supply and service town on the railroad 25 miles downstream from the high-country creeks and gulches where Montana's first gold and silver mining rush began. Many well-preserved and colorfully decorated historic structures, some dating from the 1880s, reflect the community's importance as a business and service center. A brochure in the registration packet provides more information and a self-guided walking tour around the city's main historic attractions.

Grasshopper Creek, one of the Beaverhead's tributaries, joins the main river a few miles south of Dillon. Flowing southeast from the Pioneer Mountains, the creek sluiced alluvial gold and silver into rich surface pockets discovered by Colorado prospectors traveling south from Deer Lodge Valley in August 1862. Within a month after the rush began, miners hedged their bets by staking

"ranch" claims of 160 acres or more along the creek. For the next 20 years, farms and ranches spread downstream into warmer and more fertile alluvial lands in Beaverhead Valley. Today, with over 250 ranches and farms, Beaverhead County is the largest producer of cattle and hay in Montana.

Although Bannack and Virginia City are the most famous gold rush sites in southwest Montana, several other historic mining towns and districts can be reached within an easy drive of Dillon. At Glendale, once a thriving smelter town with rail connections to Salt Lake, mill ruins and other buildings still stand along a dirt road west of Melrose, off I-15 about 30 miles north and west of Dillon. Founded in the 1870s, for 20 years it processed silver ore from mines operated by the Hecla Mining Co. Silver was one of the ores first mined in the 1860s and '70s at Argenta, 12 miles west of Dillon on a good county road. Long after early placer and shallow lode operations ceased, the Ermont lode discovery in the 1920s stimulated a revival that over the next 30 years produced some 65,000 ounces of gold.

For real adventurers with 4-wheel drive and chains (remember it's early June!), the little ghost town of Coolidge rests at nearly 8,000 ft. in the Pioneer Mountains, 50 miles northwest of Dillon & north of MT 278 up a semi-paved road past Polaris and Elkhorn Hot Springs. Rockhounds might look for amethyst and smoky quartz crystals as they drive through the Crystal Park ski area. In the late 1870s and 1880s Coolidge was a lively silver camp, with its best producer, the Elkhorn mine, enjoying a 20-year run despite the long haul to a railhead. It shut down when silver prices collapsed in the 1890s, but revived for a brief second run a decade later with new capital inflows, district consolidation, a narrow-gauge railroad and the construction of one of Montana's largest mills. All operations ceased by the late 1920s.

In early June, weather may be a factor in visiting these remote mountain sites, so be sure to check local road conditions before deciding on any independent trips.

For additional information and brochures on Beaverhead County, stop by the visitor's center at the Beaverhead Chamber of Commerce, 10 W. Reeder Street (phone: 406-683-5511).

Barretts Minerals Pre-Conference Thursday Tour

If you arrive in Dillon Thursday morning, consider taking the short bus ride to the Barretts Minerals talc plant just south of town. Plant employees will welcome you and conduct a tour led by John C. Parks, Regional EH&S Manager for Barretts Minerals, Inc., who provided the following preview.

Early Native Americans discovered talc, commonly called soapstone, in the Ruby Mountains. They found this rock easy to carve and made many things from it including peace pipes. The Lewis and Clark journals even talk about smoking the peace pipe made from talc. Local tribes mined it for their own use and for trading to other tribes. Artists still produce carvings from it, but it is now also used in paint, plastic, ceramic and health care applications. Although talc is the world's softest mineral, it has very little chemical reactivity, is practically insoluble in water, weak acids and alkalis, and has a melting point of 1500° C. These properties make it desirable for ceramic applications and excellent as a filler and extender. Talc is used in paints to make them cover better, in plastics for reinforcement and to reducing static cling, in ceramics for catalytic converters which reduce pollution emissions from vehicles, as a body powder and as a coating on tablets and chewing gum. The catalytic converters of all automobiles manufactured in North America and over 70% worldwide contain talc from Barretts mines. Since Montana talc has a

platy structure and does not contain fibers, it does not have the health risks of other minerals that could be used for these applications.

In 1954 Tri-State Minerals opened a talc plant 8 miles south of Dillon which processed ore from small mines near the plant. Now operated by Barretts Minerals, both the Treasure Mine and the Regal Mine in the Ruby Mountains are open pit mines. Operators have to remove a large amount of overburden covering the talc, mine the talc and sort it by color and chemical properties. At the plant the talc is either ground to customer specifications or beneficiated before grinding to improve chemical purity and packaged for delivery to customers around the world.

While service to customers is a primary focus for Barretts Minerals, they are also very proud of their record of community service and environmental stewardship. They are a major contributor to the local United Way and the annual Dillon elementary Birch Creek educational experience, and many other community activities. They have received recognition for reclamation of mine lands and for restoration of the Stone Creek fishery containing native Western Slope Cutthroat Trout. Barretts Minerals' employees take very seriously the company goal to "increase shareholder value while being a responsible, ethical member of the communities in which we operate."

Lodging In and Near Dillon

Although the University of Montana Western campus will host the Friday conference sessions, there is no central lodging facility for MHA visitors. Overnight guests must make their own reservations, and will have a variety of options in the immediate area, whether historic hotels, modern motels, fishing cottages, RV facilities or campgrounds. Below is partial list, provided by the Beaverhead Chamber of Commerce.

Super 8	406-683-4288	Cottonwood Cabins	406-660-1377
Motel 6	406-683-5555	Goose Down Ranch	406-683-6704
Best Western Paradise Inn (special rate for MHA visitors)	406-683-4214	Stage Coach Cabin	406-683-2593
Comfort Inn	406-683-6831	Riverfront House	406-683-2408
Creston Motel	406-683-2341	Rivers Edge B&B	406-683-6214
Dillon Hotel	406-683-9973		
Guest House Inn	406-683-3636	For college dorm rooms, contact UMW room reservations at the Student Affairs Office: 406-683-7565.	
Sundowner Motel	406-683-2375		
Backcountry Angler Inn	406-683-3462		

Post-Conference Sunday Tours

Conference participants have a choice of two different Sunday tours this year, one by bus and the second by car caravan.

For visitors who have not yet visited Alder Gulch, Montana's largest gold rush heritage site, the **bus tour** will be a real treat. In its first three years the Gulch gave up \$30 million (\$2.06 billion at today's prices) in coarse nuggets to a flood of miners that peaked at 10,000-15,000 by 1864. Before seeing parts of the 17-mile Gulch and the well-preserved town sites of Virginia City and Nevada that grew up alongside, the bus tour will visit one of the largest private collections of mining and farming machinery in the West. Lloyd Harkins spent a half-century collecting and organizing what he calls the National Museum of Machinery on a multi-acre site at Silver Star. While some visitors explore the three huge warehouses and extensive grounds chock-full of artifacts representing all phases of Montana's mining heritage, others--weather permitting--will take vans upgrade for a couple of miles to another historic property, the Broadway-Victoria Mine, where an extensive surface plant is slowly giving way to wind and weather. Nearby is the Madison mine, an active underground gold-copper operation. Sack lunches will be served either at Silver Star or at the mine site. The bus will then head southwest through the verdant valleys of Madison County to Alder Gulch. Two professional guides will lead the bus tour: Larry Hoffman, a native Montanan and mining engineer, will escort visitors from Dillon to the Broadway-Victoria site; Bill Peterson, a trained museum specialist and preservation officer, will join the tour at Nevada City and guide us through this historic district. After guided tours, visitors will have an hour of free time in Virginia City before boarding the bus about 4 pm for the one-hour trip back to Dillon.

The **caravan tour** begins in Dillon Sunday morning, guided by Ted Antonioli, a Montana native and geologist whose family has operated mines in western Montana since the 1940s. He will be assisted by another Montana native, Brian Leech, now completing his Ph.D. dissertation on Butte at the University of Wisconsin at Madison. The caravan will head north past Butte and through Anaconda to the historic silver-mining town of Philipsburg. Once a



Lloyd Harkins in his "National Museum of Machinery" at Silver Star, a destination for both tours. (Photo by Larry Hoffman)

supply center for several silver, gold, and manganese mining operations in the region, it is now a well-preserved tourist center, with many functional historic structures and eating establishments serving the retail trade. One of its many attractions is a well-run museum that holds an extensive collection of local mining artifacts. After lunch on your own, Ted--weather permitting--will lead the caravan up a steep gravel road to the historic district of Granite, site of a number of 19th- and early 20th-century silver mining operations. Hikers must be physically robust to view artifacts up close, and must be very careful around decrepit structures, slippery tailings piles, and rusty mining equipment. The tour will then proceed downhill to the ruins of the Granite-Bi-Metallic Mill (with 2 brick stacks), and may stop briefly at a modern custom mill operated by the Antonioli family. From Philipsburg the caravan will head southwest, back through Butte and side roads to Silver Star to visit Lloyd Harkins and the Broadway-Victoria site described above. The day will conclude at Silver Star around 6 pm, leaving cars to make their way back to Dillon, an easy 45 minute trip.

Mining History Association

Annual Meeting June 2-5, 2011

Dillon, Montana

Reception at Beaverhead County Museum, 15 South Montana Street
Sessions held in the Great Room, Swysgood Technology Center,
 University of Montana Western Campus (UMW), Dillon, Montana

THURSDAY JUNE 2

- 9:00-11:00 Pre-conference field trip to Barretts Minerals talc plant in Dillon (bus only – no cars)
- 10:00-noon Early registration at Beaverhead County Museum & museum visit
 1:00-5:30 15 South Montana Street
- 12:00 Lunch – open
- 1:00-3:00 MHA Council Meeting at the Beaverhead County Museum
- 3:15-4:30 MHA Editorial Board Meeting at the Beaverhead County Museum
- 5:00-7:00 Welcoming Reception at the Beaverhead County Museum
Opening of 21st Mining History Association Meeting, David Wolff, MHA President 2010-11
- 6:30-7:00 *Slideshow: Introduction to Beaverhead County* at Beaverhead County Museum
Bette Hull, former Director, Beaverhead County Museum

FRIDAY JUNE 3

- 7:30-2:00 Registration at Swysgood Technology Center - UMW
- 8:00-2:00 Book displays and vendors at Swysgood Technology Center - UMW
- 8:00-8:30 Session 1: Plenary Session
 Welcome: **David Wolff**, MHA President 2010-11
Ron Limbaugh, Conference Chair & MHA Past President 2008-09, and **Bill Culver**, Program
 Coordinator & MHA Council 2008-2011, *Conference Overview: What to Expect from the Dillon
 Program Presentations*
- 8:30-9:15 Session 2: Miners and Mining in Montana and the Pacific Northwest
 Chair: **Mark Langenfeld**, MHA President 2011-2012
Ron Limbaugh, *Comparative Gold Rushes: East Bannack (Montana) v. Boise Basin (Idaho)*
Roger Burt, *Miners and Masons in the Pacific Northwest*
- 9:30-10:30 Session 3: Social History of Rocky Mountain Mining Towns
 Chair: **Larry Hoffman**, Blue Range Engineering
Ellen Baumler, *Children in the Montana Mining Camps*
Jeff Safford, *Social Welfare in Territorial Virginia City, Montana 1864-1869*
Jane Bardal, *Southwest New Mexico Mining Towns*

- 10:45-11:45 Session 4: Environmental Experiences and Hope for the Future
 Chair: **Karen Vendl**, MHA Past President 2009-10
Stacie Barry, *Cultural and Environmental Remediation in Butte, Montana*
Richard Francaviglia, *Borax Lake, Oregon: From Mineral Extraction to Habitat Preservation*
George Vrtis, *Precious Metals Mining and the Conservation Impulse: A New View from the Colorado Rockies*
- 11:45-1:00 Lunch – open [Mathews Hall cafeteria is open to the MHA]
- 1:00-2:00 Session 5: Preservation of the Western Mining Past
 Chair: **Mike Kaas**, MHA Council Member, 2010-2013
Eleanor Swent, *The Historic Glover House in Lead, SD, and the Story of George W. Glover, Jr.*
Cathleen Norman, *Lake City and Ouray – Comparison & Contrast in the San Juan Triangle*
Ellen W. Smith, *An Exploration of Applying Historic Preservation to a Non-Architectural Historic Property*
- 2:15-5:00 Field Trip to Bannack National Historic Landmark: Bannack ghost town, cyanide mill, and first USA dredging site. Bus leaves from the parking lot adjoining the Swysgood Technology Center.
- 5:00-8:00 Dinner - open
- 8:00-9:30 An Evening at the MHA Theater: Original play written by **Lisa Hayes**: *From the Mountains of Mourne to the Mines of Montana*
 Performed in the Theatre of the Beaverhead County Museum
 No charge for admission; community invited

SATURDAY JUNE 4

- 8:00-1:00 Registration at Swysgood Technology Center - UMW
- 8:00-1:00 Book displays and vendors at Swysgood Technology Center - UMW
- 8:00-9:00 Session 6: Mining Cases from Australia, Mexico and Tanzania
 Chair: **Jody Pavilack**, University of Montana
Cliona Murphy, *Thomas Coulter's Involvement with British Mining in Mexico 1825-29*
Nathaniel Chimhete, *Gold Mining in Tanzania & Nyerere's Legacy*
- 9:15-10:15 Session 7: Mining Lawyers and Their Lawsuits
 Chair: **John Stewart**, MHA Council Member, 2009-2012
Robert F. Palmquist and **Anne E. Collier**, *The Pretended Claim Overlaps: The Case of Tombstone's Intervenor and Lost Mines, 1881*
Brian Leech, *Copper & Coal: Eminent Domain Law and Surface Mining in Montana*
Rudy Davison, *Liberty Bell Mine vs. Smuggler-Union*
- 10:30-11:30 Session 8: Researching Montana Mines and Mining
 Chair: **Bill Hawes**, MHA Council Member & MHA 2012 Conference Chair (Prescott, AZ)
Ellie Arguimbau, *Philipsburg District Silver & Manganese Mining Records*
John Koerth, *Montana Dept. of Environmental Quality Abandoned Mine Web Site*
Brian Shovers, *Map & Photographic Resources of the Montana Historical Society*

- 11:45-12:45 Session 9: Mining Papers
 Chair: **Noel Kirshenbaum**, MHA Nominating Committee, 2008-11 & MHA Past President 1996-97
Peter Maciulaitis, *Staying Informed Through the Pages of the Humboldt Register*
Corky Reinhart, *Smith Weed's Railroad: Chateaugay Ore & Iron in the Adirondack Mountains*
Emily Beeson, *New Park Mining: Memory in Papers*
- 1:00-2:30 Presidential Luncheon at Mathews Hall - UMW
 Passing of Presidential Rock Pick: **David Wolff**, MHA President 2010-11
Mark Langenfeld, MHA President 2011-12
 Presidential Lecture: *The 'Old Stonebreaker: 'James Gates Percival and the Lead Mines of Wisconsin*
- 2:45-4:00 Session 10: Technology and Understanding Its History
 Chair: **Eric Nystrom**, MHA Newsletter Editor & Nominating Committee, 2010-13
Paul J. Bartos, *How Does the Mining Industry Rate? Using Innovation, Productivity Advance, Technology Adaptation, and Corporate Structure to Assess the 20th Century Mining Industry*
J. Steven Gardner, *"A Mine is a Terrible Thing to Waste:" Kentucky's Portal 31 Exhibition Mine*
Timothy J. LeCain, *Cattle, Silkworms, and Empire: A Comparative Envirotechnical History of Japanese and American High-Modernist Copper Mining*
- 4:15-5:45 MHA Business Meeting at Swysgood Technology Center - UMW (open to all members)
- 6:00-6:30 Pre-banquet no-host bar at Mathews Hall - UMW
- 6:30-8:00 MHA Awards Banquet at Mathews Hall - UMW
 Banquet Moderator: **David Wolff**, MHA President 2010-11, *The MHA Awards Program*
 Featured Speaker: **Tom Lowe**, Assistant Manager Bannack State Park, *The Gold Dredges of Bannack*

SUNDAY JUNE 5

- All day Post-Conference Field Trip #1 by Bus
 A tour of Lloyd Harkins' National Museum of Machinery, Silver Star; Broadway-Victoria Mine; Nevada City; Virginia City and Alder Gulch. Tour guides: **Larry Hoffman** and **Bill Peterson**. Tour capacity is limited by bus seats so pre-registration is suggested – late registration only if seats available. Sack lunch provided.
- All day Post-Conference Field Trip #2 by Car Caravan
 Tour guides: **Ted Antonioli** and **Brian Leech**. A tour of Philipsburg and Granite via Anaconda. Lunch open on your own in Butte. Return via National Museum of Machinery, Silver Star. No limit on participants – late registration possible.

Attention Vendors!

The Mining History Association is an organization of individuals from the United States and other countries with a common interest in all aspects of mining history. Normally our meetings attract up to 150 visitors, not including speakers and other participants from the local area. During our 3-day meeting in Dillon in June 2011, many visitors will be interested in mining-related books, artifacts, specimens and other collectible material, especially but not exclusively about Montana and the Northern Rocky Mountain mining region. **On Friday and Saturday, a limited number of vendor tables will be available at \$20 per table in a secure location in or adjacent to the Great Room on the UMW campus** where most of the proceedings will be held.

Table space will be reserved on a first-come first-served basis. Interested vendors with relevant material should contact **Ron Limbaugh**, the chair of local arrangements at: limbaugh@mcn.org

Readings on Mining History in Montana and the Pacific Northwest

Compiled by Timothy J. LeCain

Aiken, Katherine G. *Idaho's Bunker Hill: the Rise and Fall of a Great Mining Company, 1885-1981*. Norman: University of Oklahoma Press, 2005. An insightful history into one of the most important Pacific Northwest mining operations of the twentieth century.

Baumler, Ellen. "More than the Glory: Preserving the Gold Rush and Its Outcome at Virginia City." *Montana: The Magazine of Western History* 49, no. 3 (1999): 64-75. A good introduction to the historic birthplace of the Montana mining industry from its early placer days to the development of capital-intensive hydraulic mining. Also offers interesting insights into the challenges and opportunities of historic preservation of an early mining center.

Brown, Ronald C. *Hard-Rock Miners: The Intermountain West, 1860-1920*. College Station: Texas A&M University Press, 1979. A standard classic work that offers some insights into the history of northern mining operations.

Chadwick, Robert A. "Montana's Silver Mining Era: Great Boom and Great Bust." *Montana: The Magazine of Western History* 32, no. 2 (1982): 16-31. Good account of Montana's early silver mining boom.

Christensen, Bonnie. *Red Lodge and the Mythic West: Coal Miners to Cowboys*. Lawrence: University Press of Kansas, 2002. An insightful history of how the Montana coal mining town of Red Lodge redefined itself as a "wild west" cowboy town to attract tourists, part of a larger tendency of the public to ignore the industrial history of the West.

Ficken, Robert E. *Unsettled Boundaries: Fraser Gold and the British-American Northwest*. Pullman: Washington State University Press, 2003. Good account of the often neglected gold rush to the Fraser River territory of British Columbia and its effects on the history of the Pacific Northwest.

Isenberg, Andrew C. *Mining California: An Ecological History*. New York: Hill and Wang, 2005. A path breaking environmental history of mining from the early placer mining days to the development of large-scale hydraulic and underground lode operations. The focus is confined to California, but the overall historical pattern analyzed is relevant to subsequent developments in Montana and the Pacific Northwest.

Malone, Michael P., and Richard B. Roeder. *Montana: A History of Two Centuries*. Seattle: University of Washington Press, 1976. Chapters on "The Mining Frontier," "Railroads, Silver, and Statehood," and "Copper and Politics, 1880-1910," provide a good overview of the history of mining in Montana.

Morrissey, Katherine G. *Mental Territories: Mapping the Inland Empire*. Ithaca, NY: Cornell University Press, 1997. A wonderful

introduction to the historical development of the idea of the Pacific Northwest as a distinct region with considerable coverage given to debates over mining and environment in the region.

Morse, Kathryn Taylor. *The Nature of Gold: An Environmental History of the Klondike Gold Rush*. Seattle: University of Washington Press, 2003. The first environmental history of a major gold rush. The focus is obviously on the Klondike, but much of what Morse has to say is applicable to Montana and the Pacific Northwest.

Paul, Rodman W. "After the Gold Rush: San Francisco and Portland." *The Pacific Historical Review* 51, no. 1 (1982): 1-21. Particularly useful for Paul's discussion of the neglected role of the city of Portland in the western gold rushes.

Purple, Edwin R., and Kenneth N. Owens. *Perilous Passage: A Narrative of the Montana Gold Rush, 1862-1863*. Helena: Montana Historical Society Press, 1995. An intriguing first person account of the gold rush to Bannack, Montana, and the violence and vigilantism that marked the chaotic early years.

Resnick, Susan Kushner. *Goodbye Wives and Daughters*. Lincoln: University of Nebraska Press, 2010. A good popular account of the 1943 Smith coal mine disaster near Red Lodge, Montana, which claimed more than seventy lives. It was the worst coal mining accident in Montana history but is almost entirely forgotten.

Ridge, Martin. "The Legacy of the Gold Rush." *Montana: The Magazine of Western History* 49, no. 3 (1999): 58-63. Insightful consideration of the long-term consequences of the western Gold Rush for Montana and the West.

Safford, Jeffrey J. *The Mechanics of Optimism: Mining Companies, Technology, and the Hot Spring Gold Rush, Montana Territory, 1864-1868*. Boulder: University Press of Colorado, 2004. A gem of a little book that offers unusually fine-grained insights into the operations of a frontier gold mining operation in territorial Montana.

Spence, Clark C. *The Conrey Placer Mining Company: A Pioneer Gold-Dredging Enterprise in Montana, 1897-1922*. Helena: Montana Historical Society Press, 1989. A pioneering analysis of a sophisticated Montana gold dredge mining operation near Virginia City by one of the greatest historians of western mining.

Wyman, Mark. *Hard Rock Epic: Western Miners and the Industrial Revolution, 1860-1910*. Berkeley: University of California Press, 1979. Like Brown's book of the same year noted above, this general western history offers some useful analysis of Montana and the Pacific Northwest.

"Readings..." (continued on page 10)

"Readings..." (continued from page 9)

Zhu, Liping. *A Chinaman's Chance: The Chinese on the Rocky Mountain Mining Frontier*. Niwot: University Press of Colorado, 1997. A refreshing new interpretation from an award-winning American scholar.

The Montana Gold Rush Online

Thanks to recent efforts to put public domain materials online, free downloads of classic accounts of the mining rushes in the Northern Rockies are available at <http://www.archive.org> and <http://books.google.com>. Search the sites or follow the links below for several accounts by observers working for the federal government, with the year(s) covered by each report in square brackets:

Report of J. Ross Browne on the Mineral Resources of the States and Territories West of the Rocky Mountains [1867]. Washington: Government Printing Office, 1868.

<http://www.archive.org/details/mineralresorock00browrich>

Rossiter W. Raymond. *The Mines of the West: A Report to the Secretary of the Treasury* [1868]. New York: J.B. Ford and Company, 1869.

<http://www.archive.org/details/minesofwestrepor00raymrich>

Rossiter W. Raymond. *Statistics of Mines and Mining in the States and Territories West of the Rocky Mountains* [1869]. Washington: Government Printing Office, 1870.

<http://www.archive.org/details/statisticsofmine1870raym>

Rossiter W. Raymond. *Statistics of Mines and Mining in the States and Territories West of the Rocky Mountains* [1870]. Washington: Government Printing Office, 1872.

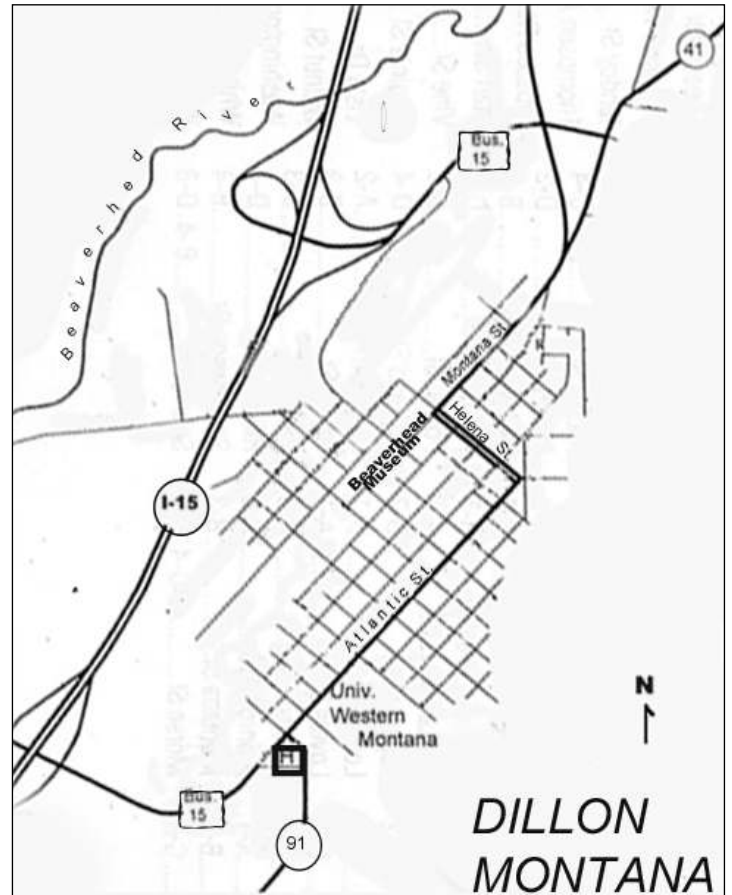
<http://www.archive.org/details/statisticsofmine1871raym>

Rossiter W. Raymond. *Statistics of Mines and Mining in the States and Territories West of the Rocky Mountains* [1871]. Washington: Government Printing Office, 1873.

<http://www.archive.org/details/statisticsofmine1872raym>

Rossiter W. Raymond. *Statistics of Mines and Mining in the States and Territories West of the Rocky Mountains* [1872]. Washington: Government Printing Office, 1873.

<http://www.archive.org/details/statisticsmines05treagoog>



Sketch-map of Dillon shows I-15 on the left, the Beaverhead County Museum at 15 S. Montana St. in the center, and the campus of the University of Montana Western along S. Atlantic St. (Business-15) in the lower-center. (Map from Ron Limbaugh)

Join the MHA or Renew Your Dues

If you are attending our Annual Conference, you can easily join or renew your membership on the Conference Registration Form. (The mailing label indicates the calendar year through which your dues are paid.) Your careful attention to dues payment helps save the MHA money for reminders -- Thank you!

General Membership:	\$25.00
International:	\$35.00
Sustaining Membership:	\$50.00
Patron Membership:	\$100.00
Corporate Member:	\$500.00

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

Future MHA Meetings

Dillon, Montana: June 2-5, 2011

Prescott, Arizona: June 7-10, 2012

Galena, Illinois: June 2013

MHA 2011 Conference Registration Form

Dillon, Montana -- June 2-5, 2011

Your Name (for badge): _____

Spouse/Partner Name
(for badge): _____

Other Name (for badge): _____

Mailing Address: _____

City/State/Zip/Country: _____

Email / Telephone: _____

 Please list me in the conference packet I am a current member (2011 on mailing label)

Event	Cost per Attendee	Number Attending	Total per Event
Conference Registration: <i>Members = \$65, Non-Members = \$70, Spouse/Partner = \$10, Children (w/adult) = \$10, Single Day = \$35</i>	\$65 / \$70 \$10 / \$35		
MHA Annual Membership (U.S. / International)	\$25 / \$35		
Thursday Pre-Conference Tour: Barretts Talc	\$12		
Thursday Reception Beaverhead Co. Museum	\$10		
Friday Tour: Bannack National Historic Landmark, ghost town, & cyanide mill	\$23		
Friday Evening Theatre (numbers needed)	free		
Saturday Presidential Luncheon Buffet	\$18		
Saturday Awards Banquet (circle choice): meat / fish / vegetarian	\$25		
Sunday Tour 1: All day bus tour to Silver Star, Broadway-Victoria Mine, Alder Gulch (circle lunch choice): ham / turkey / roast beef	\$37.50		
Sunday Tour 2: All day caravan tour to Philipsburg, Granite, Silver Star. Price per auto.	\$10		
Total Payment			

For additional conference information,
contact **Ron Limbaugh**:

limbaugh@mcn.org
707-785-3814 (home)
707-322-7608 (cell)

Make checks payable to: **Mining History Association**
(payments in U.S. dollars; Credit Cards **not** accepted)
Mail completed registration form and payment **by May 4** to:

MHA Dillon 2011
c/o James Tackett
P.O. Box 1197
Gualala, CA 95445

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

First Class Mail

Upcoming Events

22nd Mining History Association Conference

June 2-5, 2011

Dillon, MT

<http://www.mininghistoryassociation.org>

17th Australian Mining History Association Conference

Sept. 13-19, 2011

Hahndorf, South Australia

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

Western History Association Conference

Oct. 13-16, 2011

Oakland, CA

<http://www.westernhistoryassociation.org>

9th International Mining History Congress

April 17-20, 2012

Johannesburg, South Africa

23rd Mining History Association Conference

June 7-10, 2012

Prescott, AZ

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.

Deadlines: Spring issue: February 15
 Summer issue: June 15
 Fall issue: August 15
 Winter issue: November 15

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

Mining History Association
P.O. Box 552
Sedalia, CO 80135
www.mininghistoryassociation.org