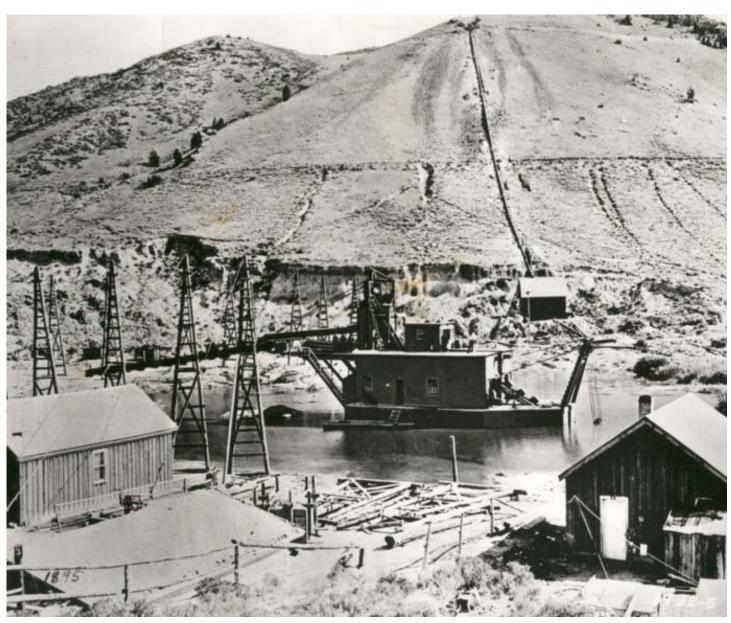


The Gold Dredges of Bannack

By Tom Lowe



The F. L. Graves, shortly after launching.

(photo courtesy Beaverhead County Museum)

Montana Ghost Town Quarterly

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Founded in 1969, the Montana Ghost Town
Preservation Society is a 501c3 non-profit
organization dedicated to educating the public to the
benefits of preserving the historic buildings, sites, and
artifacts that make up the living history of Montana.
Opinions expressed in the bylined articles are the
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Spring 2009

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Prez Sez John Ellingsen

As some of you may know, President John has recently undergone several medical tests and is currently doing physical therapy. We all wish him a speedy recovery and look forward to seeing him back at the helm soon.

Knowing John, he would have been too modest to mention it in his column, but since he is not here to defend himself, I'll let you in on some news. Last November the Montana Preservation Alliance and the Montana Historical Society held their joint Excellence Awards, and the award for the Lifetime Achievement went to John for his tireless work over thirty years to save Virginia and Nevada cities. From working at hands-on restoration jobs, to creating interpretive displays to recently convincing legislators that they should bring the mining towns into State ownership, John has done it all and more. Congratulation John, a well deserved recognition. – Editor.



PULL UP A CHAIR

Terry Halden

My last editorial brought some comments in the form of a letter to the editor from long time member, John Stoner of Townsend, in which John goes on to point out that another culprit in the destruction of ghost towns is the Montana Department of Environmental Quality. His letter in its entirety is printed on page 3, opposite. John confided in me that although his letter blasts the DEQ, he admitted that on occasion, they do some fine work, often cooperate with local people and that he has several friends that work for the DEQ. As a result of this letter I asked John to write an article about the Toston smelter, which he willingly did and it will appear in our next issue.

In this issue, I am grateful to Tom Lowe for his two-part informative history of the gold dredges on Grasshopper Creek, something that I'm sure most of you, like me, know relatively little about. Tom was also kind enough to ferret out photos of each dredge to illustrate his article.

Finally, by the time you read this, I will be in my native Wales. I'll take some photos of the local architecture; some of it goes back a thousand years!

Terry

OBITUARY

The Montana Ghost Town Preservation Society was saddened to learn of the passing of long time member **John R. Warwood** on November 18, 2008. John was born May 14, 1933 at the William Warwood homestead in Reese Creek, to John Lewis and Gladys (Maher) Warwood. After graduating from Bozeman's Gallatin High School he attended Montana State College and then joined the Coast Guard. Following the Coast Guard, he worked for Pacific Northwest Bell for 37 years and whilst working in Seattle he met his first wife, Susan Roos, whom he married in 1955. John and Susan had three children before Susan passed away in 1965 after a long bout with cancer. John married his second wife, Barbara Sines in 1969.

Retiring in 1995, John and Barbara moved to the family ranch in Belgrade and at the time of his passing they had been married for 39 years. On behalf of our entire membership, our sincere condolences go out to Barbara and the rest of John's family.

New Members

Secretary Rosemary Lee reports the following **New Members** have joined our Association since the last newsletter.

Please make them welcome.

M. G. T. P. S. BOARD MEETING November 8, 2008

The meeting was called to order by President John Ellingsen at 11 am at the home of Dick and Rosemary Lee. All board members were present with the exception of Nick Shrauger, Tom Lowe and Loretta Chapman. Guests were Kay McAllister, Nancy Allen & former officer, Shirley Powell.

Minutes of the September 5, 2008 board meeting were approved as read.

Treasurer's Report. Current checking balance: \$10,554.850, Edward Jones money market account, as of September 26, 2008: \$12,410.06.

Old Business

- Butte convention. Eighty-nine members and guests attended.
 Terry Halden, chair, thanked those who assisted with plans and advertising. A good time was had by all. Receipts totaled \$4,384.85 and expenses were \$4,223.94.
- As in the past, donations will be given to local places of historical interest that we visited. The board voted to contribute \$250 to the World Museum of Mining, \$200 to the historic Dumas Brothel building, and to invest \$100 in a memorial brick purchase at the Granite Mountain Mining Disaster Memorial.
- Board members agreed the Butte bus tours provided an excellent way to learn from the guides as we rode, vs. a caravan of members' cars.
- John Ellingsen and Dick Lee reported on signage for the Nevada City historic trail project. We will provide information to the MT Heritage Commission so they may order the five interpretive signs. The signs will acknowledge MGTPS and Ryan Palma & Brian Bermingham of Bitterroot Valley Forest Products as donors.

New Business

- Susan Howe and Kay McAllister will arrange next year's convention in West Yellowstone Sept. 11-13, with Shirley Powell assisting. The Povah Community Center has been reserved from Friday noon, Sept. 11 to Sunday noon, Sept. 13 at a cost of \$200. The committee will arrange activities and speakers.
- John E. and the McAllisters briefly addressed the recent Montana History Conference that was held in Glasgow, and the board voted to provide John with a \$300 scholarship to defray attendance costs.
- A compilation of excellent photos from the Butte convention is now on our website, thanks to Terry, and our quarterly newsletter will now appear there, as well.
- Jan O'Brien raised a question: Should MGTPS carry liability or other insurance when we are on an organized trip to a ghost town or as a means of protecting our assets? He will obtain further information A second question: should we place a disclaimer on registration forms for convention participants to sign?
- A new president, vice-president and secretary/treasurer are needed to begin serving two-year terms in September 2009.
 All who have served on our board for two years are eligible.
 Terry Halden offered to serve as president.

Miscellaneous

- The board discussed making donations to additional county historical societies and other organizations that make requests, and it was agreed to limit contributions to those on our current list.
- Rosemary shared news from board member, Loretta Chapman, that both she and her husband, Bill, had undergone serious brain surgery over the late spring and summer. They are both recovering nicely, she wishes the board well and hopes to again join us.

John Ellingsen modestly announced that he was a recent recipient of the Montana Preservation Alliance's Lifetime Achievement Award. Congratulations on the well-deserved honor, John!

The meeting was adjourned at 12:30, followed by lunch and visiting.

Rosemary Lee, Secretary/Treasurer

LETTERS TO THE EDITOR

Enjoyed your "Pull Up A Chair" in the Winter 2008-2009 Montana Ghost Town Quarterly......now 'pull up a chair' as here is the rest of the story.

One of the biggest culprits in the disappearing of our old ghost town structures is none other than our very own Montana Department of Environmental Quality (DEQ)!!!! They are on a constant witch-hunt, under the disguise of "mine cleanup", to systematically remove all traces of historic mining in Montana. What is really appalling about the whole deal is that the tax-payers of Montana are paying the bill.

Just recently, the DEQ swooped down upon the old Toston Smelter site just up river from Toston, and hauled off and buried the only remaining evidence of that once historic site. This was a popular landmark of the Toston people who took pride in showing it off to their guests.

The DEQ has been busy elsewhere in Broadwater County. Several years ago they got a burr under their saddle over the old Western Coal & Coke Co. mine and mill site just downstream from Lombard, moved in with their wrecking crew, hauled off the slack dump, closed the adit and tore down all the mine buildings. Fortunately they spared the brick coke ovens. The official reason for the destruction was, and I quote, "Evidence of visitation." I assume that means you and me and any other history buffs. Not content with the destruction of the Western Coal & Coke property, they then moved a mile up stream to Lombard itself and scooped away all the evidence of any coal left over from the days of coal fed steam powered locomotives, destroying who knows what else in the way of historic features.

The DEQ likes to tackle Broadwater County's side of the Elkhorn Mountains. A while ago they set their sights on the old mining camp of Mason (once known as Gold Dust) in the Park Mining District. There were a couple of mine adits that were seeping a bit of 'toxic' waste, which could have been sealed at nominal cost, but no, not the DEQ. They wiped the slate clean by not only sealing the adits but hauling off every ore dump in sight, destroying log buildings and mine structures dating back to the 1860s and burying all the old ore cars belonging to the overhead tramway. They 're-shaped' the whole area, including putting up a chain link fence to enclose a newly grass seeded area to keep out deer, elk and of course, any mine buff.

The DEQ now has its sights set on the Johnny's Gulch area south of Radersburg in the old Cedar Plains Mining District, which is the home of the Keating / Ohio mines, the Black Friday mine and the site where old Keating once stood. They are waiting for the 'Go Ahead', and once given goodbye Keating.

Granted, the DEQ, once in a while, does something constructive, such as the Vosberg mine and mill site cleanup above Winston, in the Elkhorns, where toxic water was poisoning and killing livestock. But that was a rare exception.

On a happier note, thanks for the 'Worth A Visit' dedicated to our Broadwater Museum.

John Stoner. Townsend, MT

THE GOLD DREDGES OF BANNACK

Part one by TOM LOWE



The discovery of gold on Grasshopper Creek by a group of prospectors from Colorado on July 28, 1862 started a huge gold rush to what became the state of Montana. The town of Bannack

sprang into existence that fall providing for the needs and wants of the people arriving at the new gold discovery. Bannack was typical of many mining towns and experienced boom and bust periods, depending upon the fortunes of mining. Many of these mining camps were eventually abandoned and became ghost towns. The first miners swiftly exhausted the rich, easy to recover placer deposits with rocker boxes and sluices. Some of the rich, deep bench gravels were worked by sinking a shaft to bedrock to drift mine the buried placer gold. The early miners also dug a series of ditches to bring water to the bench deposits. This water enabled the miners to ground sluice and hydraulic mine these gold deposits. However, the miners were unable to get at the deeply buried stream placers, as they could not pump the water out fast enough to work them. During the first years many lode deposits were found but for the most part these required much more investment capital to develop and most were developed in later years. Following Bannack, other rich gold fields, most notably Alder Gulch, Last Chance Gulch and Confederate Gulch, were discovered and many miners hurried to these new diggings to seek their fortune. By the early 1890s Bannack had become a sleepy mining town with limited gold mining. But the town of Bannack would experience another boom period with the development of gold dredging.

Although the glory days of placer mining were over at Bannack, the miners knew that a fortune in gold remained buried deep under the gravels of Grasshopper Creek. The problem was in finding a way to profitably mine these deposits. Drains were used along some potions of the creek where the grade was sufficiently steep. A long trench was dug to bedrock to drain the water so they could drift mine the rich gravels on the bedrock. Drains however, were costly and not always effective and the primitive water pumps were not very effective. The answer to this problem had already been solved in New Zealand where gold dredges were first developed. Samuel Harper, a wealthy Montana mining engineer, was inspired by New Zealand gold dredges and the Bucyrus connected bucket dredge used to dredge a drainage canal in Chicago around 1890. He bought up 75 acres of placer ground at Bannack, got his wealthy Chicago friends to invest and had the Bucyrus Steam Shovel and Dredge Company of Milwaukee, Wisconsin build a dredge of his own design.

The 'Gold Dredging Company' of Chicago, Illinois was organized with H. J. Reiling as president and general manager, F. L. Champlin vice president, Malcolm McDonald secretary and L. C. Bonney treasurer. Bannack merchant Fielding L. Graves was also an investor in the company. In the summer of 1894 Sam Harper was placed in charge of constructing the dredge boat but he later resigned and the project was completed under the supervision of Rene Curin. Steam shovel dredges had been tried in California as early as 1888 but were not successful. However, Montana's first gold dredge was an electric powered, connected bucket dredge and was the first successful gold dredging operation in North America. The old Graves-Graeter ditch was extended to a high point on the south side of the creek to provide water for the turbine that would generate electricity. Bucyrus manufactured the dredge machinery and General Electric manufactured the electric motors, the equipment was shipped by train to Red Rock, Montana and then hauled by wagon teams to Bannack. This first dredge was quite small by modern standards, according to the Bucyrus Steam Shovel and Dredge Company blueprints of February 13, 1895, the electric elevator dredge # 64, hull was 60' x 36' x 7' 6." The wood hull was constructed on the creek bank at the east end of town and the machinery installed there. The creek was diverted by means of the old Marysville ditch and a large pond was dug, it was then dammed and the creek returned to its channel to float the dredge.

The event was big news and on May 22, 1895 the Dillon Examiner reported the following:

"In the presence of a large concourse of people comprising the entire population of Bannack and the surrounding country, as well as many Dillon and Chicago visitors, the dredging boat built for the Gold Dredging Company was successfully launched Wednesday, May 15, 1895, at 2:45 p.m.

A large number of invited guests, including many ladies, witnessed the ceremonies from the boat. When the time arrived, Mrs. H. J. Reiling, of Chicago, the wife of the president of the company, broke the customary bottle of champagne and christened the boat the 'Fielding L. Graves,' in honor of Bannack's well known pioneer merchant. Cheers rent the air as the boat slid gracefully from its ways and floated on the waters of Grasshopper Creek. The launching was successful beyond expectation. Not the slightest accident or delay occurred, everything worked smoothly and to the entire satisfaction of the designer and builder of the boat. After navigating the waters of the river for half an hour, during which time the visitors sampled a basket of champagne donated by Hon. F. L. Graves and toasted the success of the new hydraulic mining enterprise, the boat was tied close to the shore and the visitors landed."

Although the article stated everything worked perfectly it soon became apparent that the design was unsatisfactory. The buckets only held one and a half cubic feet of gravel and were changed that fall to five cubic feet buckets. The sluices were originally slung from cables anchored on either side of the gulch. This unwieldy design was abandoned and replaced by sluices towed behind the dredge on scows. The secondary lift bucket system, that fed the sluices, was replaced by a gravel pump. This double lift design and other changes allowed the F. L. Graves dredge to operate at a profit. The dredge operated profitably until 1902. Philip Shenon reported that the dredge costs between \$35,000 and \$40,000 to build. The dredge took out \$22,000 one week and \$38,000 the next week when it worked the richest ground. This easily covered the cost of building and operating the dredge that season. The gold was smelted into bars and shipped east.

Besides design problems, which were corrected with modifications, another problem occurred on July 25, 1896 when the laborers went on strike for higher pay. Rather than negotiate, the company simply hired other workers to replace them. In retaliation, one night soon afterwards, the former workers blew up the ditch flume that provided water for the electric generator. Despite these setbacks the dredge worked every season until freeze-up into 1902 when it ran out of gold bearing gravel. In the spring of 1903 the dredge was dismantled and the machinery and scrap iron was sold to William M. Perkins of Chicago. A few remains of the F.L.Graves dredge can still be seen along Grasshopper Creek just inside Bannack State Park's west boundary.



The F. L. Graves, after it was refitted. (Photo, Beaverhead County Museum)

The success of the F. L. Graves gold dredge prompted the building of four more dredges along Grasshopper Creek. In April 1896 a second dredge boat was begun. This dredge was built just east of Marysville on the Gold Leaf Placers. A new design was tried using a cutter head and suction method of removing gravel from the creek. The dredge began working on July 27, 1896 but by the middle of August work stopped. The suction design frequently clogged and was not powerful enough so the dredge was redesigned as a double lift connected bucket dredge. In May it was ready to start and the Dillon Tribune reported:

"Saturday, May 23rd, 1897, was a great day in the history of Bannack. The occasion was the christening of the dredge boat, the 'Maggie Gibson,' owned and operated by the Chicago Mining and Development Company, of whom C. C. Gilman, of Marshalltown, Iowa, is president. George S. McNeil of Portland, Oregon, is vice-president, W. H. Barry of Chicago is secretary and treasurer, and Edward L. Smith of Bannack is manager.

The exercises were begun by Mrs. Maggie A. Gibson, in whose honor the boat was named, who stepped to the bow of the boat and with one blow smashed the ribbon bedecked bottle of champagne against it; the steam whistle was turned loose, the band played, the people cheered, and the boat was named."

The Maggie A. Gibson was powered by three one hundred horsepower boilers and used eight cords of wood a day. The dredge operated for two seasons when the lease on the ground expired in 1898. The next year the dredge was dismantled and moved to the Conroy placers at the mouth of Alder Gulch. It was the first double lift, connected bucket style dredge used on Alder Gulch.

Continued next issue.

The Maggie A. Gibson (Photo courtesy of Beaverhead County Museum) Housed in the old two-room elementary school at 27 Mountain View road in Clancy is the Jefferson County Museum. Sherry Carlson, the volunteer curator, explained that the museum uses the space for an exhibit in one room, currently devoted to covered bridges, railroad bridges, trestles and tunnels, both past and present, and in the second room is a photo display currently featuring the black and white ghost town photos of Deer Lodge photographer Lee Silliman. This latter exhibit will run until the end of May, when it is planned to change and highlight the ghost towns of Comet and Elkhorn, to include many archival and current photos of these Jefferson County icons of the mining age.

In early 2003, a traveling exhibit from the Smithsonian Institute, called 'Barn Again' came to the Jefferson County Museum. The exhibit was a collection of barn photos and artifacts from all over the States and to compliment it a local craftsman, Bob Marks, built a scale replica of his family's barn. The large-scale model is now on permanent display at the museum whilst the real barn can be seen about a mile to the north of the museum.

Presently the museum is only open Fridays and Saturdays, 1p.m. to 5 p.m. and Sundays 2 p.m. to 4 p.m., but Mrs. Carlson added that she is hopeful that further funding could be secured in the future to enable the museum to increase the hours it is open. Of course one can always get her to open the museum for special occasions by calling 406-933-5528 and leaving a message, which she promises to respond to.



The model barn in the museum and, below, the real barn









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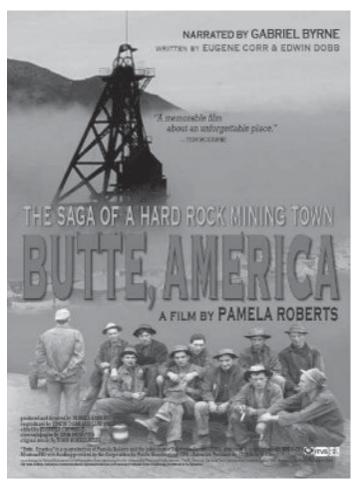
mos HELENA, MONTANA.

REVIEW

Montana based Rattlesnake Productions, Emmy nominated director/producer Pamela Roberts and Butte writer Edwin Dobb have combined to produce the excellent documentary 'Butte, America: The Saga of a Hard Rock Mining Town'. After former U.S. representative and Butte native son Pat Williams introduced the film, the history of Butte is told in just over an hour. It relates Butte's beginnings, its development, the evolvement of the copper kings and the labor movement, through to its demise as a mining entity, primarily because the Anaconda Company sustained losses it could not live through when its vast involvement in copper mining in Peru was nationalized by the Peruvian government.

Irish actor Gabriel Byrne, along with news footage and archival photos, narrates the history of the city. The story is interspaced with local residents telling interesting anecdotes about their personal histories, a much more appealing approach than having the usual 'talking heads', professors and so called 'experts' on the subject, reading, often times poorly, from a script.

One of our guides at the World Museum of Mining, John Shea, is prominently featured and one of our members, Mike Byrnes is listed in the credits. The only fault with the story was its ending. Instead of going on to show mining in other developing countries around the world, which are going through the same teething problems faced in Butte over the years, it would have been more enlightening to show the steps Butte is now making to recover from the loss of mining interests.



After the show, director Pamela Roberts spoke briefly to the audience explaining that, because of the need to raise capital to finance the film, it took nearly ten years to complete, and in that time frame several of the Butte natives interviewed in the project passed away. Her comments were followed by what she termed her 'In Memoriam', a poignant recap screening of those elderly residents that we had just witnessed telling their stories, others that for time constraints were not included in the production, all of which were no longer with us. It is hoped that when PBS show this documentary in the fall the 'In Memoriam' segment is included at the end.

So far the documentary has been screened in Butte, Bozeman and Helena, with another showing being scheduled for Helena (the two performances on February 21st were sold out) and possibly other locales in Montana. If you get an opportunity to see the production it is a 'don't miss' show. But be forewarned: advance tickets to the show can only be reserved by calling the production company (406-586-1151) and not the local cinema where the show is to be screened.

NEWS IN BRIEF

GARNET, GRANITE COUNTY.... In February, the Bureau of Land Management, which oversees the old ghost town of Garnet, high in the Garnet Mountains, held a 'block party'. Well, not exactly. In the olden days, Frank Davey, who operated the general store and a saloon in Garnet used to employ seasonally out-of-work miners and sent them down the mountain to the frozen Beavertail Pond to cut ice. The blocks of ice were then hauled by sled back to Garnet and placed in the icehouse beneath the store and preserved for summertime. This way, Davey could keep his meats and produce fresh and could supply small blocks of ice to customers for their needs; he even produced ice cream for the 4th of July celebrations. The BLM has re-created the trip to Beavertail Pond, using volunteers and original ice cutting equipment, even down to tongs capable of hauling the 100 lb blocks of ice. The only concession to modern technology was, instead of sleds, BLM trucks were used to haul the ice back to Garnet. It is hoped, that this summer, ice cream will once again be available in Garnet.

FORT HARRISON, LEWIS AND CLARK COUNTY.... The Montana Military Museum, at Fort Harrison, Helena, which has been in existence since 1984, but with two warehouses full of classified artifacts, is looking to raise \$750,000 to erect a new building connecting its current two buildings. So far veterans have raised \$150,000 of that total and hope to get some corporate donations in the near future. Presently, exhibits display artifacts from Lewis and Clark, the Indian wars, the Mexican-American war and W.W.II, but end there. The extra space would be used to illustrate the Korean war, the Cold war, the Persian Gulf war and Iraq wars.

Continued on back page





MONTANA GHOST TOWN PRESERVATION SOCIETY P.O. BOX 1861, BOZEMAN, MT, 59771-1861

NEWS IN BRIEF

BEARCREEK, CARBON COUNTY...... On the morning of February 27, 1943, an underground explosion of methane gases in Smith Mine No. 3, near Bearcreek resulted in the death of 75 coalminers and was the worst coal mining disaster in the history of Montana. Today, the mine site is on private property, but last fall, the Carbon County Historical Society were shooting videos at the site and an application is to be submitted to add the site to the National Register of Historic Places. After the disaster the mine adits were sealed with concrete and whist Bearcreek residents mourned the loss of life of 75 of its residents, coal mining in the area was soon to come to a close, spelling, virtually, the end of Bearcreek.

FORT MISSOULA, MISSOULA COUNTY..... The Historical Museum at Fort Missoula and the University of Montana are combining to form a joint force to preserve and study the former Fort Missoula Alien Detention Center, which operated in the early 1940s at the site. During the early stages of W.W.II hundreds of Japanese and Italian nationals were sent to Fort Missoula and detained there as they were deemed a threat to security. The University owns nearly 100 acres at the fort and about half the area was where the camp was located.

PIONEER MUSEUM, GALLATIN COUNTY.... The Gallatin Historical Society's Pioneer Museum, located in the old county jail, 317 W. Main St., Bozeman is in financial trouble. Last year the society had expenses of \$277,000 whilst income from membership dues and admission fees only totaled \$162,000. Alas, dues and admission charges are about to increase, but what is needed is a few more fund raising activities.

PIONEER MUSEUM, RAVALLI COUNTY.... The Bitterroot Valley Historical Society, that operates the Pioneer Museum located in the Ravalli County Courthouse at 205 Bedford St, Hamilton is another museum that is in financial trouble, although this trouble is of a different sort. The County Courthouse was built in 1900 by A. J. Gibson and after its intended use came to an end in 1979 rather than demolish the building it was acquired by the Society and made into a pioneer museum. But by 2009, the building is showing its age and is badly in need of upgrading. The most pressing problem is the roof leaking in numerous places, but in addition, crumbling masonry, outdated electrical wiring and damaged gutters are in need of repairs and maintenance. The museum is open year round, Tuesday to Friday, 10:00 a.m. to 4:00 p.m. and on Saturdays, 9:00 a.m. to 2:00 p.m.

HISTORY MUSEUM, CASCADE COUNTY.... The Cascade County Historical Society, which operates the History Museum located at 422 – 2nd St. S, Great Falls is requesting area residents to donate anything relating to local school memorabilia. This can include old report cards, textbooks and old letter sweaters. The Museum is planning an exhibit of education through the last hundred years, scheduled to open this summer. The museum is open year round, Tuesdays to Fridays, 10:00a.m. to 5:00 p.m.