



GRAND RIVER HERITAGE MINES SOCIETY NEWSLETTER

January, February, March 2000

Tid Bits, by Jean Farquharson

Well, we have made it into the year 2000 (the new millennium begins next year), the world has not ended, and the electricity is still functioning as is this computer. **Happy New Year!**

I am pleased to report that **Ilse Kraemer** invited me to her presentation by the **Grand River Conservation Authority** of a **Special Recognition Award** for saving the perched fen from the clutches of industrial development (and all her other projects). On this very auspicious occasion with many officials present, a **video** was shown of all the recipients and their activities. Ilse will let us see her copy of the tape at a later meeting. She received a beautiful **framed print** which is now hanging in her house. Congrats!

Our **Xmas pot luck supper** was very well attended this year. We were glad to see that Francis and Barbara Topp came all the way from Dunnville, and the Pearts and Mary Nelles from York and Caledonia. Helmut Pankratz and Tai Bui, Weslake Environmental Engineering Consultants, and their families were our special guests. We also greeted Don and Joy Hurst on their first visit to GRHMS.

After a delicious meal, **Gwen Parkhill** gave her excellent **slide show** of rare and beautiful plants from provincial parks.

Coming Events

If the weather cooperates, there may be more **field trips** this winter. To assure being included, call Ilse at 519-756-6634.

Our executive is planning a **public meeting** in April, with **election of officers, adoption of Constitution and guest speaker**. Please come and bring a prospective member. We are organizing more formally in order to apply for affiliation with Ontario Historical Society. Thus we will become incorporated and eligible to apply for grants. We need grants to accomplish some of our aims; e.g., publishing a book and booklets, **Watch for details in the next newsletter.**

Contributions

In this issue, we have our first article from **Cathy MacArthur** -- *Devil's Cave*. Cathy has donated several articles and pictures to our archives. Gwen Parkhill has allowed us to examine her legal search of C.1, Lots 11, 12, 13 of Brantford Township (Mile Hill). Bob Hasler has donated a mailbag of the Gypsum, Lime & Alabastine Co.

It's Time to Renew Memberships

January is the month when memberships are due. Please fill out the attached form and mail or deliver it to Ilse as soon as possible before our open meeting.

The Gypsum Caves Of Sorbas

by Jean and Allan Farquharson

While Al and I were travelling in October and November, we visited gypsum caves at Sorbas in southern Spain. Travel brochures disclosed that there were tours of this, the largest karst cave system in the world. It is not completely explored, having been discovered only in 1989.

We drove through a parched mountain area dotted with scrubby trees; the dried up Rio Aguas barely flowed through deep ravines. We drove past a billboard advertising a tourist trap where "spaghetti cowboy" movies were made. Directed by signs from the main highway, we followed a back road to a large parking lot where signs led us up a hill past carefully planted and watered palm trees to a very neat modern building.

At the Registration office we found that the next tour was at 2 p.m. When our guide arrived, he outfitted us with battery packs and lantern helmets. He warned us that even the short easy tour of 1 1/2 to 2 hours would be rough going. Since no one else arrived, we had a personal tour by our guide, and we could exchange information about our Ontario gypsum mines and Spain's gypsum deposits.

To enter the caves, we had to crawl on our hands and knees and squeeze through a narrow entrance. Wandering through the first gallery, we found it was not wet and cold as we expected, but comfortably cool compared to the hot weather (70's) outside. And it was very dry! In fact the floor of the cave was covered with a thick layer of fine dust. The dust was left by the action of rocks

disintegrated by the streams of water running through cracks in the bedrock. The dissolution process, over eons, created gaps forming the subterranean caves.

We walked over layers of gypsum rock that had collapsed on the floor of the cave when the layers above of soft marl rock had disintegrated into dust. We were glad there were no collapses while we were there!

Water still runs through this cave system in the rainy season. We came to an area where there was a shallow lagoon of water. We saw only a few stalactites which form only from evaporation when a draught is created when drawing in the outside air. We struggled up and over collapsed ledges of rock and over large boulders blocking our way through the dark cavities. I needed help to get my stiff old bones hauled over some of the huge rocks. It was rough going but I was determined to see the whole thing! Finally we climbed up and tottered out of the caves, relieved to see the daylight.

The gypsum at Sorbas is different from the gypsum found in Ontario. It looks more like granite and contains a lot of glittering selenite in very hard crystals. Our guide told us that until 50 years ago the gypsum used to be mined nearby in an open pit mine. Gypsum was important in the building industry in Spain; plaster was used with rocks to construct the walls of buildings. Now concrete is used; then the walls are painted white. On our way back to the Registration building, we passed the ruins of the old calcining ovens beside the quarry where the gypsum had been dug out. We plodded back to our car, dusty, stiff and exhausted but happy from our spelunking adventure!

Devil's Cave, by Cathy MacArthur

In the eighteen eighties the town of Paris decided they needed a dependable source of water for the town's needs. The Paris fire department had an inadequate source of water to combat the numerous fires taking place during this era. Paris chose the site of Devil's Cave on the Nith River off Misener Road because of the numerous natural springs found there. A pumping station was built and a pipe laid.

Today the steps which led down the steep face of the bank are gone but the foundation of the pumping station remains. Only a few years ago a cold snap broke a water main at Highway 2 and Misener Road. During repairs, pipe dated 1885 was discovered on the line.

Devil's Cave owes its name to the geology of this area. Located at the edge of Barker's Bush on a curve along the Nith, a large karst formation has been exposed. This area has been a popular place for kids to swim and fish in summer and skate during the winter. My dad told many stories of how they would dive into the river down to the opening below the surface to enter the famous cave. He and his friends would follow the entrance up to an air pocket within the huge formation.

The area at Devil's Cave has an industrial history as well. Located on the flats and hillside beside the cave are old foundations, a number of raceways, old roads, an overgrown mill pond, and large deposits of tufa. The area has a history of Gypsum mining also. There is a story told

of three German prisoners of war who had escaped from a train passing near Paris. They hid in the old mine shaft about five hundred feet from Devil's Cave along the southwest bank. Three school kids overheard them talking among themselves and told their teacher, who reported it to Police Chief Thomas Bean. Bean gathered a force of fifteen men and recaptured the men without incident.

The river today still runs deeply through here with a strong current, but the unstable area has slumped over the years, forcing the river's course to move over to the West.

A History of the Gypsum Mines and Mills Along the Grand River,

by Jean Farquharson

(Reprinted from *Grand Actions* -GRCA)

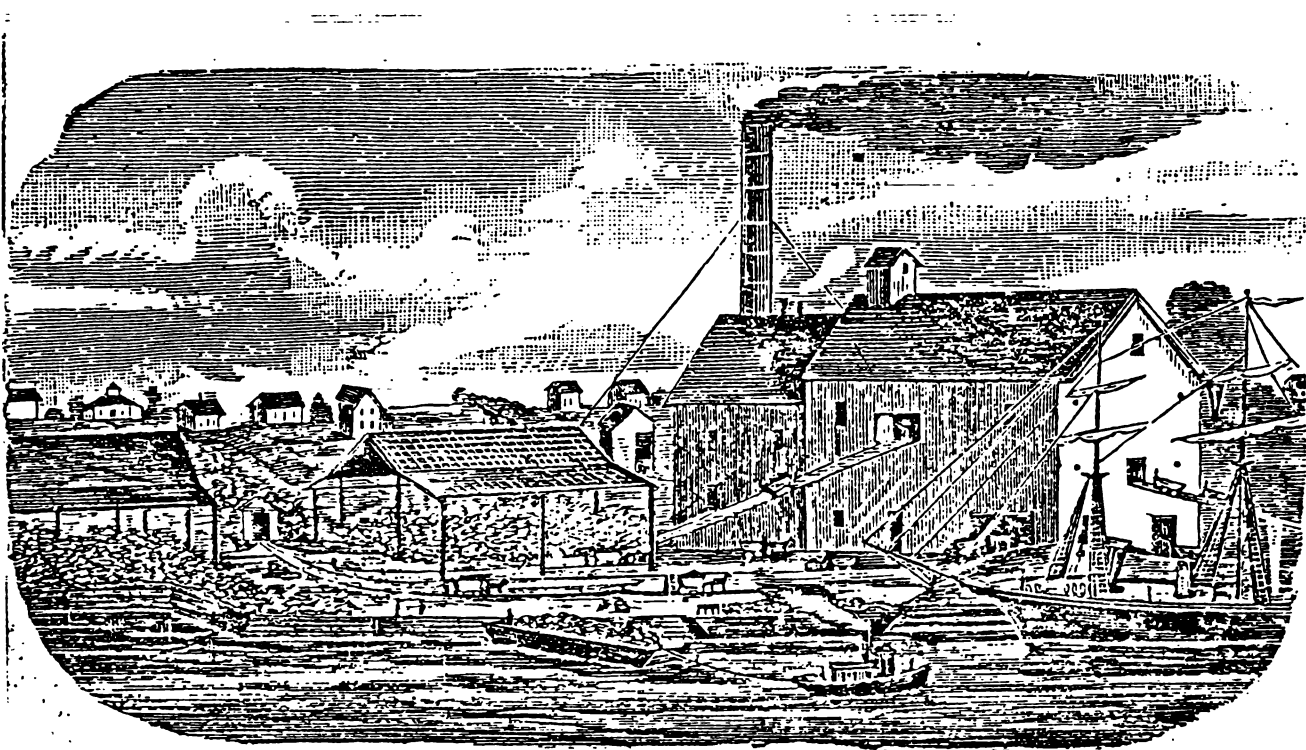
Gypsum mines and mills are an important but often unrecognized part of the history of the Grand River, influencing the growth of many watershed communities, their agriculture and their use of the river for power and transportation.

Gypsum (calcium sulphate) was formed eons before the dinosaurs existed. Ancient evaporating seas deposited gypsum between the layers of sedimentary rock, dolostone and shale, in the Salina bedrock formation. This formation runs down the length of the watershed on the east {and west} side of the Grand River. Millions of years later glaciers deposited sand, gravel and glacial till above the rock. It wasn't until the Grand River cut out its valley to the bedrock that the gypsum was exposed to the surface.

In 1793, the surveyor Augustus Jones discovered a large deposit of gypsum on the banks of the Grand River where it is joined by the Nith River. Speculators became interested in the gypsum and the water power provided by the rivers. In 1805, Benjamin Canby acquired from Joseph Brant a 999-year lease for 600 acres of this part of the Haldimand Tract which had previously been granted to the Loyalist Six Nations. George Hamilton, namesake of the City of Hamilton, acquired the rights and leased them to Squire William Holme, the first settler in the Paris area. Holme opened the first gypsum mine in Ontario at "the forks" in 1822, adding a

raceway the following year and a mill to grind the gypsum. The gypsum was sold to settlers as fertilizer or "land plaster" or as coarse plaster for their houses.

In 1829, an enterprising Vermonter named Hiram Capron, bought out Holme. Capron had already made his fortune from the bog iron around Long Point by producing at the Normandale Furnace, stoves and household implements needed by settlers. Capron laid out the town of Paris to bring in more settlers, and continued to farm and to quarry and grind the gypsum. By 1831, Capron advertised 200 tons of land plaster for sale.



GRAND RIVER GYPSUM WORKS, OF CAYUGA, ONT.

By 1841, Capron and his partners hired Thomas Armstrong to use tunnelling to extract the gypsum. Meanwhile, William Dickson, who had purchased Block 1 of the Haldimand Tract, opened up a mine, millrace and mill on the Grand, east of Paris. This operation was later purchased by Capron and his partners.

The 1851 census recorded that Paris' population of about 1000 lived mostly in 206 lath and plaster houses. These were built by 26 masons and plasterers using gypsum dug out and hauled by several miners and labourers.

By 1871, along the new millrace on Willow Street, 61 employees worked at a large mill that had been built by one of the partners, Thomas Coleman.

The mines and mill were purchased in 1895 by the Alabastine Co., which produced a patented paint, Alabastine, and various other gypsum-based products that became well-

known across Canada. This company expanded across Canada as the Gypsum, Lime and Alabastine Co., and continued with its main office in Paris for many years. In the 1950's it was sold to Domtar.

By 1905, the last gypsum mine had closed in Paris and most of its gypsum operations moved to Caledonia where a purer form of gypsum existed. This could be used to produce finishing plaster, paint, plaster of Paris and other products for which the impure gray gypsum of Paris was not suitable.

HOMES HEALTHFUL AND BEAUTIFUL



Public Library and Reading Room, Paris, Ont.

- q Moulding coated white Alabastine White
- q Ceiling coated with Alabastine tint No. 17 and White mixed
- q Wall coated with Alabastine tint No. 15



ALABASTINE is particularly adapted for use in modelling and other relief decoration. Work of this class is very beautiful, but should not be attempted by amateurs without our special directions.

Church's Alabastine is the material usually applied to the walls of public buildings. Its beauty and its sanitary, durable and fire-proof qualities entitle it to the high place it holds in the estimation of the public. As it will not rub or peel from brick, iron or wood, no matter how many coats accumulate thereon, it is also the best material for coating the interiors of factories.

Although Haldimand County cannot lay claim to the first gypsum mine, its history began early in 1838, when the Cook and Martindale families settled at York and opened their own mines on their farms. The Martindale Mine became part of the Lythmore operation many years later.

As early as 1850, mines were opened south of Cayuga. These were later operated by settler, John Glenny, and by William Hamilton Merritt, (grandson of the founder of the Welland Canal) who established the village of Gypsum Mines. Only a schoolhouse now remains to mark the village site. Gypsum was transported along the Grand River Navigation system of locks and canals by lighters such as the Gypsy Queen. Until replaced by the railroad, the lighters were cheap forms of transportation which allowed easy loading onto larger boats going to the United States and other destinations.

Companies sprang up such as the New England Co. Mine., the Grand River Plaster Company, and the Excelsior Mine which was eventually bought out by the Alabastine Company and used as a source of pure white gypsum for its Paris operation.

The Alabastine Co. also invested in the mine at Lythmore, located on the Michigan Central Railroad, until it was closed and replaced by the Caledonia mine. Domtar operated this until 1998 when Georgia-Pacific took over the operation of the large automated mine and drywall plant near Caledonia.

A similar large modern operation is owned by the Canadian Gypsum Company (CGC) at Hagersville. Both are very important to the present

economy of the area.

Mining Lore, by Mike O'Byrne

For a variety of reasons, primarily because the mining industry in the bonanza years of the 1860's was extremely speculative and populated by unscrupulous promoters and



absentee property owners, miners frequently went unpaid, or had to resort to some pretty interesting ways to recover lost wages. Mines suddenly went out of business or managers used the miners' unpaid wages to purchase newer equipment so that the mine could make more money, faster.

In 1887, 225 miners employed by the Georgetown Consolidated Mining Co. approached the company for the \$75,000 in back wages owing to them.

Receiving no word from company officials and observing that the four management officials had boarded themselves up in the mining plant, the miners decided to act. The miners kidnapped the four officials, holding them until the \$75,000 was paid later the following day. The miners got their wages, company officials were released, and newspaper accounts of the incident

reported that the miners had been sober, well-behaved and treated their prisoners with respect.

Another novel scheme to enhance the miners' pay and have instant cash was the practice of highgrading. This was the miners' way of getting even with a thieving corporation. Highgrading only worked in very rich mines.

In such mines the end of the shift whistle signalled a procession of miners leaving work with bulging pockets, ore stashed in double crown hats, pants with interior pockets, and spacious lunch pails. The practice thrived on a grand scale in mining towns such as Cripple Creek and Goldfield in the U.S. and was also practised in Canada, Kirkland Lake, Timmins, Matheson and Pickle Crow, etc.

In Goldfield, Nevada, highgrading evolved into an artform. The ore was incredibly rich, in one case assaying over \$250,000 per ton. Of the 54 Goldfield assayers, only 3 dealt with legitimate ores.

The companies were making huge profits from the heartbreaking toil of the miners who were paid \$3.00 to \$4.00 per day, a relatively high wage. Since the owners were so rich they would not miss the ore surreptitiously removed by the miners. A loose sort of public sympathy developed for the allegedly poor miner against the allegedly rich and impersonal mining company.

Businessmen and women in the bonanza towns believed that highgrading was a sound practice as they reaped the benefit. It was not unusual for miners to spend \$100

per day on wages of \$5.00 per day.

The mine operators' response varied from firing the whole mining crew to hiring spies. Miners would be blacklisted and forced to relocate to a mining area where they were unknown.

This artform was common in Canada. A former colleague of mine had his own set of scales to figure out the weight of gold he was purloining and effectively compensated himself against the extremely poor wages he was being paid. He, before being blacklisted, supported his consumption for alcohol which was substantial, operated expensive cars and paid for his daughter's wedding.

He and I were then working in a copper mine where the wages were better but there did not seem to be a market for hot copper ore. It is still an accepted right for miners to pick up mineral samples for sale to rock hounds as long as it doesn't involve precious metals.

A Little Bit From Here and There, by Ilse Kraemer

This fall we had planned many field trips, but the weather did not cooperate very much, and rain set in on most week-ends. One trip was a very important one for us -- the property of Peter Piovaty, located on the west high embankment of Mile Hill. Over the years we have heard many stories of mines being discovered when the large pond was built, and of an Indian village and sacred burial ground. This fall Peter gave us permission to research his huge property. It is very much overgrown, but with some imagination, one can see how it was a long time ago.

There were many switchbacks on the road

leading up the steep embankment. A gully filled with water could be the collapsed mine tunnel. There were a lot of talus heaps every where which suggested mining activities.

The area where the mines are believed to be shows many pipes sticking out of the ground. This area is overgrown now by hundreds of Carolinian spice bushes. What a sight it must be in spring when they are in full bloom. Peter will allow us to visit his property again this year.

Another outing was into the Northwest to do more research on the fen and disappearing streams. We saw cinquefoil, blue gentian, sundews and Ohio goldenrod. This suspended or hanging fen is supported by many springs. Extensive research was done on the aquifer underlying the tableland. Interestingly, we have three aquifers at three levels. The upper one, an unconfined aquifer, gets its water from infiltration of precipitation. This aquifer is unconfined and has a depth from one meter to 18 meters below ground. The surface water flows in a south-westerly direction since the land is tipped in this direction. The middle aquifer is partly confined and the low aquifer is completely confined in the bedrock. Its water supply is derived from a source east of the Northwest. Owing to the unstable condition of the land, like Karst-like topography (all the disappearing streams and mining activities from long ago), the City of Brantford will undertake soundings.

Just before Christmas a group went to research the most easterly section of the Northwest. Here we have both disappearing and reappearing streams (water spouts). This area is literally covered with small to ton-size chunks of tufa. Even an old barn foundation is built out of tufa.

The rare hackberry tree and other very rare plants grow here. We have some cold water streams around 8 degrees Celsius all year around, old foundations of Indian settlements from the late 1700's and signs of activities involving calcining of the tufa. When calcined, tufa becomes a soft white powder. It was used as a fertilizer and a natural cement.

In November, I met our new member from Kitchener - Mr. Robert McCauley, when he came to Paris to see a mine and gypsum. I showed him the Capron Mine, just below the Paris dam. I had thought it would be easy just to walk along the fishermen's trail, but the going was rough. It seemed that the whole hill had shifted towards the Grand River, toppling several old trees. However, we located the old double-tunnel entrance and collected some gypsum.

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This newsletter is edited by Jean Farquharson. We are not responsible for errors. We are looking for more information about the mining industry in Southern Ontario. Submissions are welcome.

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