

THE WALKING QUESTION MARK

Newsletter of the Grand River Heritage Mines Society

(Always Digging for Answers)

JANUARY-FEBRUARY-MARCH -APRIL 2001

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Bits and Pieces

by Jean Farquharson, Editor

Happy New Millennium ! Arthur C. Clarke's image of 2001 in his famous novel and movie has not yet come true, but lots of exciting changes are occurring in the world. We celebrate by changing our newsletter's name.

Your **membership renewal** form is included with this mailing! Please mail it to Ilse.

The last few months have been very busy for the GRHMS, with field trips, meetings, and our Christmas Pot-Luck. We have lots to report - 10 pages.

Ilse had an interview with the Hamilton Spectator - a large spread for our society! As a result of the article, she was contacted by people who have information about the Chrysler Mine/Cave which will probably result in some field trips there in the spring.

WatOnEarth, newsletter of the University of Waterloo Earth Sciences Dept. (through Peter Russell) requested an article about our society. It should be online at www.science.uwaterloo.ca/earth/waton/waton.html

We are sorry to report that Ron Belliveau, owner of the property where the Cayuga Mine is located, died suddenly just before Christmas, at the age of 50. The Belliveaus

were very kind to allow us to visit their property several times. Our sincere sympathy.

Our Chairman, Mike O'Byrne, has acquired a carbide lamp for display purposes. This will supplement the helmet with lamp and battery pack he acquired a few years ago. Thanks also to Mike for donating drill bits from a gold mine in Alaska.

We are sorry that one of our newest members, Daryl Coulson has moved to Pembroke. Daryl contributed so much to mining history in Paris by compiling information. It is book size already and we hope that it will be printed soon.

Seraphin DaSilva rescued a precious piece of history for us from a historic house he was tearing down. It is a chunk of early drywall. The plaster is mixed with wood shavings, and on the back is a stamp reading "*The Ontario Gypsum Company Ltd., Head Office Paris, Ontario. Gyproc Wall Board. Nail this side to studs.*" Mike O'Byrne has made a plexiglass frame so that we can display it.

Contributors to this issue:

* Al Robson joined us this fall on a few of our field trips. He has contributed a short article for us about one of the short courses offered by Wilfred Laurier University on its satellite campus at Brantford which members may be interested in attending.

*Mike O'Byrne is updating us on exciting mining events.

*On Oct. 15, we toured the **Martindale Mine** with the ever witty Herb Martindale as our host. Ilse describes the trip in detail in one of her reports.

She also provides follow-up reports on the fascinating field trip to **Mount Olivet**, and on the pieces of red desert flint we found.

*I promised you a further report on the October 21 field trip to the **Garland-Carson Mine**. I located historical and underground maps which also help to explain what we saw on our excursion.

*I shall also report on the Oct. 28 Workshop at Smokey Hollow Estates, Brantford, presented by the Brant County Branch of the Ontario Genealogical Society - a very worthwhile research day !

***It pays to search on the Internet! My roving this fall led me to connect with Georgia Pacific headquarters in Georgia .**

Through that contact I received a thick package from Connie Stubbs, Human Resources manager in the Caledonia Office. It contains a lot of historical information and copies of their newsletter, *The Clearing House*, from 1929 and 1939. I have yet to read all the information thoroughly, but will report to you at a later date.

Business Meeting to Adopt Constitution

At lunchtime the same day as the field trip to the Martindale Mine, we held a business meeting at the home of Alf and Eileen Peart. The most important business was to adopt our Constitution. This is one step in our plan to incorporate so that we can apply for grants. We ate our lunches around the huge table in front of a warm fire in the old dining room- kitchen which Alf and Eileen have restored to its charming pioneer style. We thank the Pearts for their hospitality.

A Special Celebration at York

At 2:30 that same afternoon, we went to York Park to see the official dedication of a plaque marking the site of the Davis, Martindale Flour and Grist Mill (1870-1921). The plaque was erected by the York, Grand River Historical Society, with the assistance of the Ontario Heritage Foundation. It was a very impressive ceremony, with a bagpiper piping in the official party. Along with hymns and prayers, we heard speeches from the mayor and Fred Thompson, who did much of the organizing of the event. Alf Peart and Mary Nelles were also important contributors. The signs which the Society had purchased to mark the site of the various locks along the Grand River Navigation Company were on display. Everyone was invited back to the Hall afterward for hot drinks and goodies arranged by Eileen Peart.

Our Christmas Pot-Luck at Ilse's was well-attended. If you missed it, you missed a lot of good food and chatter. This year's entertainment was a video produced by GRCA giving an outline of the contributions of each of their special award winners who contributed something important to the area. Ilse was one of the award winners for her work in Brantford's Northwest. We thank Ilse for her contributions and also to serving as hostess at our annual function.

Mining Trivia - by Mike O'Byrne

Nineteenth and early 20th century miners prided themselves on their skill at hand drilling blast holes. While they were competent in related mining skills such as timbering,

blasting, tracklaying, or mucking (shovelling), their claim to fame was their ability to hand drill.

Until the introduction of compressed air operated rock drills around the mid 1870's, blast holes were drilled by hand. Depending upon the situation, blast holes would be single jack drilled or double jack drilled. The reader should bear in mind that the drilling operation was carried on with inadequate lighting from candles or carbide lamps, frequently in a cramped work site and a poisonous atmosphere. Consider also that the blast holes were being drilled up and down and at all locations in between.

Single jacking was a drilling technique involving one miner. The miner would swing a short handled 4 pound sledge hammer with one arm while twisting the drill steel a fraction of an inch between hammer blows.

Double jacking was the more spectacular technique requiring two miners. One miner would swing a long handled 8 pound sledge hammer while his partner would hold and twist the drill steel. Both techniques required a minimum of 50 blows per minute to be effective.

The major holiday in US mining camps was July 4th. Annual hand drilling contests were held all over the mining districts where miners could demonstrate their skill. Top prizes ranged in value from \$125.00 to \$400.00; but the winner of the Colorado State Championship could win \$5000.00. One miner from Butte, Montana, won \$13,000 00 in prize money throughout the western US.

Drilling contests consisted of a 15 minute

session during which two miners, due to sheer exhaustion had to switch positions from swinging the 8 pound sledgehammer to holding the drill steel and changing the drill steel every minute when it became dulled. Several times during the event the drill steel had to be replaced by a longer length of drill steel.

Two miners from the Coeur d'Alene mining district of Idaho drilled a hole 35 5/8 inches deep in 15 minutes. Walter Bradshaw of Butte, Montana, and his partner won the world's doublejacking championship by drilling 556 inches in 15 minutes. Bradshaw competed against one of the early Burleigh compressed air drills and while he beat the machine for 15 minutes, he could obviously not keep up that pace for a ten hour shift.

It should be kept in mind that the hardest rock available was selected for drilling, extremely hard granites, rhyolites, etc.

I would suspect that there were a number of miners roaming about with maimed hands.

The Martindale Mine, by Ilse Kraemer

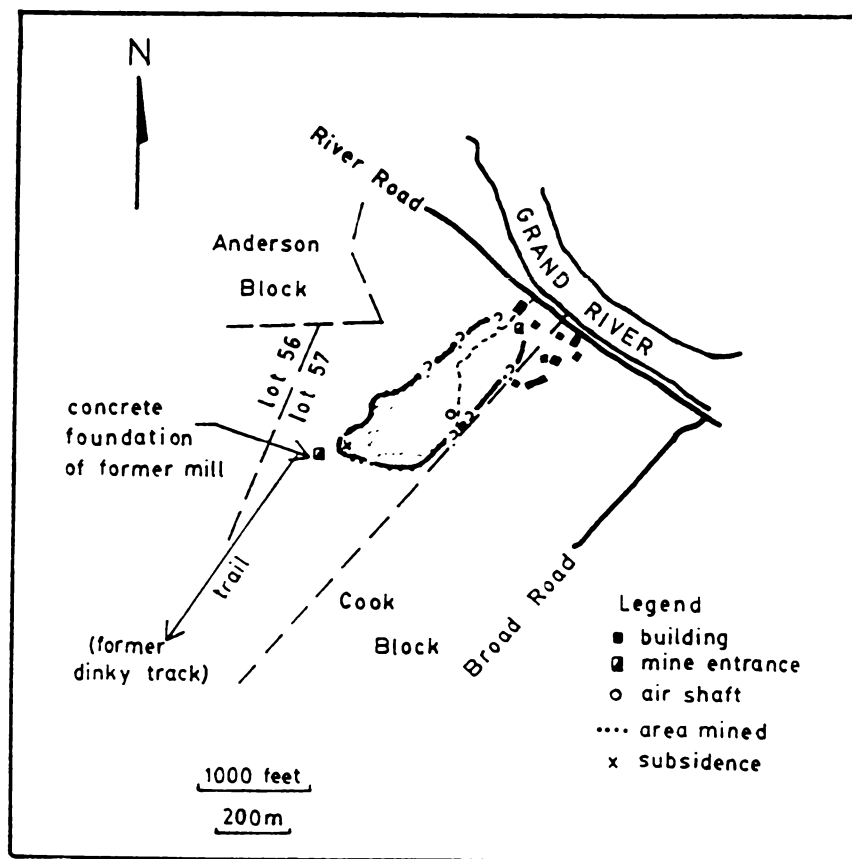
When we arrived, Herb graciously invited us into his house. What a surprise to see such a large private collection of books. Herb lent me a box full of old historic magazines. After a nice long chat Herb offered to show us the remains of the Martindale Mine.

One of the declines is very close to his home in a steep embankment. To reach the other mine, we had to walk through thick and thin and finally reached a laneway leading through the farm fields. It was lined with red and black oak, maple and black cherry. On top of the hill was the mine or what was left of it.

Weeds, bushes and brambles had taken over. A bit of digging unearthed many pieces of gypsum and shale lying all over the area. This was the site of where the mini- railway track to Lythmore began. It went through Peart's bush, past Lythmore No. 2 mine, and over to the large Lythmore mine and gypsum plant. A lot was left of the Martindale mine and a steep shaft with an iron ladder open for brave explorers.

The Martindale Mine was opened by John Martindale in 1846 and was worked almost continuously for 50 years.

In 1908 it was reopened by the Crown Gypsum Company. In 1917 it amalgamated with the Alabastine Co. and renamed the Ontario Gypsum Company. The mine was worked under this name until it closed in 1919. In the early years, the gypsum was processed in a grinding and calcining plant at York. After 1908, the plaster was processed in the new plaster plant at Lythmore. The worked-out mine must have been large (for those times), and from time to time the farmers had to fill in the holes that appeared in the fields.



Laurier Course Explores the Wonders of the Grand River Valley, by Al Robson

With Wilfred Laurier's satellite campus now established in Brantford, area residents can take advantage of several special interest courses offered through the university's Department of Continuing Education.

An exceptional example is a four lecture course entitled *The Grand River as a Heritage River: a Study of its Physical and Cultural Geography Characteristics*. Course instructor Warren Stauch addresses the various characteristics of the Grand as it meanders from its source near Dundalk to its mouth at Port Maitland. Topics range from the effects of the glacial periods on the landscape to the important role people have played in developing the region. Following the four lectures, Mr. Stauch arranged a day-long field trip to visit key points throughout the watershed, including unique landforms such as drumlins, eskers and glacial spillways, and man's mark upon the land in terms of the flood control systems, farming, quarrying and settlements.

Future lecture series are planned but dates are not yet available. Mr. Stauch is a retired geography teacher who also spreads his knowledge and enthusiasm for the Grand Valley by conducting what he calls "shunpiking tours". He defines shunpiking as "avoiding the superhighways, seeking out the scenic roads".

Mount Olivet, by Ilse Kraemer

Our last research outing in 2000 was really outstanding. In our last newsletter, I told you about the geology of the Onondaga

Escarpment outcrop. Several members and a few guests enjoyed this memorable trip, and we were really surprised at the many fossils and the size of them.

On our arrival, Mrs. Richard's gave us permission to rove around her large farm property. We didn't find the cave where the spring gushes out nor the waterfall. We did find the network of ponds with a lot of waterfowl living on them. I was intrigued with the landscaping done with so much love and imagination., the beautiful old barn in A-1 shape and the many lilacs growing every where.

From the farm, we went over to the cemetery with its beautiful memorial rock garden, and from there to the old quarry on the westerly side of Mt. Olivet Rd. Some years ago a water bottling company built a factory there, but it was never opened for production. We used their driveway to access the quarry. This area appears to be an alvar - a limestone surface with hardly any soil. The fossils in the rock were out of this world, more fossil than stone. This ocean bed many millions of years ago must have been overcrowded with life, primitive life. I found a fossil like a leaf from a maple tree. It needs identification by an expert. We came upon a grove of oak trees, old and stunted, all the rare chinquapin oaks and no hybrids. We were delighted. We found clumps of grasses with very fine thread-like curls, and some sort of low bushes with masses of tiny cherry-like pits under them. Most of the plants could not be identified.

We excitedly observed masses of green frogs the size of a leopard frog, but allover green and only in one part of the rocky area. Some of the rock showed highly polished striation marks left by a glacier grinding its way over

the area. I believe it was not the Wisconsin but an earlier glacier. In this area close to Lake Erie, one finds many small unglaciated sections. Imbedded in the limestone is a lot of flint, and due to the many Indian artifacts found in this area, I believe that we had many flint quarries where the Indians quarried for their raw material. I pointed out all the deep red flint, called desert varnish. It is only a coating on the stones, pointing to their extreme age and is very common in dry desert areas.

Although we spent a few hours, we only saw the tip of the iceberg. Much more time and intensive research must be spent on this area. I reported it to the MNR Natural Heritage Information Centre. Wasyl Bakowski had not heard about this area, and would like to do research this coming spring. Who knows what plants will show in spring and over the seasons. I can't wait for spring to arrive.

RED-COATED CHERT AND FLINT

On our recent visit to Mt. Olivet, we found a lot of pieces of flint coated with red desert varnish. Members of our group had never seen this red flint. During my research of red-coated flint many years ago, I had contact with many scientists around the world. This is a relatively new science, and complicated, but rock in the Calico desert of California has been dated at 185,000 years. This is an oxidization process in which bacteria play a role. Manganese-eating bacteria in clay and soil discharge red material. One such bacterium called thiobacillus thiooxidans converts FeS into FeSFeSO_4 . Another bacterium Ferrobacillus ferrooxidans needs acid water ($\text{pH} < 3$) and FeCO_3 to change it into Iron Hydroxide (FeOOH). This research was done by Dr. M. Buechner, Geo Institute, Bielefeld, Germany

(obtained by personal communication).

The highly glossy coating is really interesting. In some areas flint is very easily polished by wind. Sand particles in the wind will polish rocks to a very high shine over a long period. In our case, the flint was glossy on all sides. This is an amorphous silica coating $\text{SiO}_2 \cdot n\text{H}_2\text{O}$. Silica rich water covers the red flint, percolating around it. The sun evaporates the water. Silica accumulation precipitates on flint. The heat of the sun, reflected by bedrock, hardens the shiny coating. This process is repeated again and again over the years and a very hard coating is formed. The former very dull red flint is now very shiny on all sides.

I have tried to make this very complicated technical process understandable. We want to keep this newsletter readable!

Research From Whiteman's Creek W.I. Tweedsmuir History, compiled by Jean Farquharson

The Fred Taylor Farm, south part of the North half of Lots 11-16 [Brantford Twp].

First owned by brothers Thomas and Wm. Gordon, sons of Francis Gordon (also owned Gilston Park Farm). At some time during the 34 years the brothers owned Cottisbrook, gypsum was mined from the ground. It also belonged to the Cox family - Capt. Peter Cox owned property in Paris as well

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History of the north parts of Lots 11 and 12, Concession 2 [Brantford Township], Lyverne Hunt, owner. Plaster and gypsum was being mined from the farm. Thomas W. Coleman, a Paris businessman who had made an alliance with Hiram Capron to develop the plaster beds, held deeds for the mining rights of this property as well as for other areas around Paris. Coleman in turn leased to other men We have been told that the mouth of the mine on this farm was large enough to drive a team and wagon into it

WE VISIT THE SITE OF THE GARLAND- CARSON-MUTCHMORE- SMITH MINES

by Jean Farquharson

From government documents and publications, we found out the following information:

Mr. N. Garland of Toronto operated two mines, one in Concession V, Lot 13 and in Concession VI, Lot 13. It began about 1870 when Joseph Brown sank a water well on his property and ran into 4 ½ feet of white gypsum of good quality. Brown sold the property to Garland, who started to mine it shortly after. The incline drift, driven southwestward from a few feet above the level of Mackenzie Creek, caved and filled with clay overburden. Then a new opening was started on an incline of 1 to 9, and gypsum was struck at a vertical depth of 57 feet. The gypsum bed was about 4 ½ feet thick, with a roof of about 5 inches of soft dolomite.

About 1879, the mine was operated by Mr. Mutchmore.

Mr. L.H. Johnson, who became owner of the property in 1881, operated it for nine or ten years.

In 1891, Mr. Garland again obtained the property and operated it until 1895.

Mr. Garland opened a second mine in 1886 on the west half of Lot 14, Concession V, Oneida Township. It was purchased by William Smith in 1898.

The gypsum bed was found at a depth of 70 feet through an inclined drift.

In 1895 both properties were taken over by the Alabastine Company of Paris (part of the Ontario Gypsum Co.) and renamed the Carson Mine.

The most recent Carson Mine was located on Lot 13, Concession VI, now owned by Blake Schaeffer. The gypsum occurred in lenticular masses varying in length from 100 yards to over ½ mile. The lenticular form was shown in this mine where the bed began to diminish and then ended abruptly. Following this a considerable area of clay pan was passed through and another mass of gypsum located and mined. The rock was dug out and hauled to the Gibson farm across McGowan Rd. where it was stockpiled, and later taken in wagons to the mill in Caledonia, where it was ground up and shipped all over Ontario to be used as fertilizer. When the Alabastine Company took over, they sent their gypsum to the mill at Paris, where it was used to make plaster and alabastine paint. The Carson mine closed in July 1920.

Harold Cruikshank lives on the property where the Smith Mine was located. The airshaft on his property was 60 feet deep, and it is now filled in.

There was a cave-in in his corn field four to five feet deep, which has been filled in. He also located an old mine wheel and a talus heap. This mine was located close to the route of the new Highway 6.

On the Schaeffer property Mr. Cruikshank remembers seeing sinkholes where the airshaft and drifts had been.

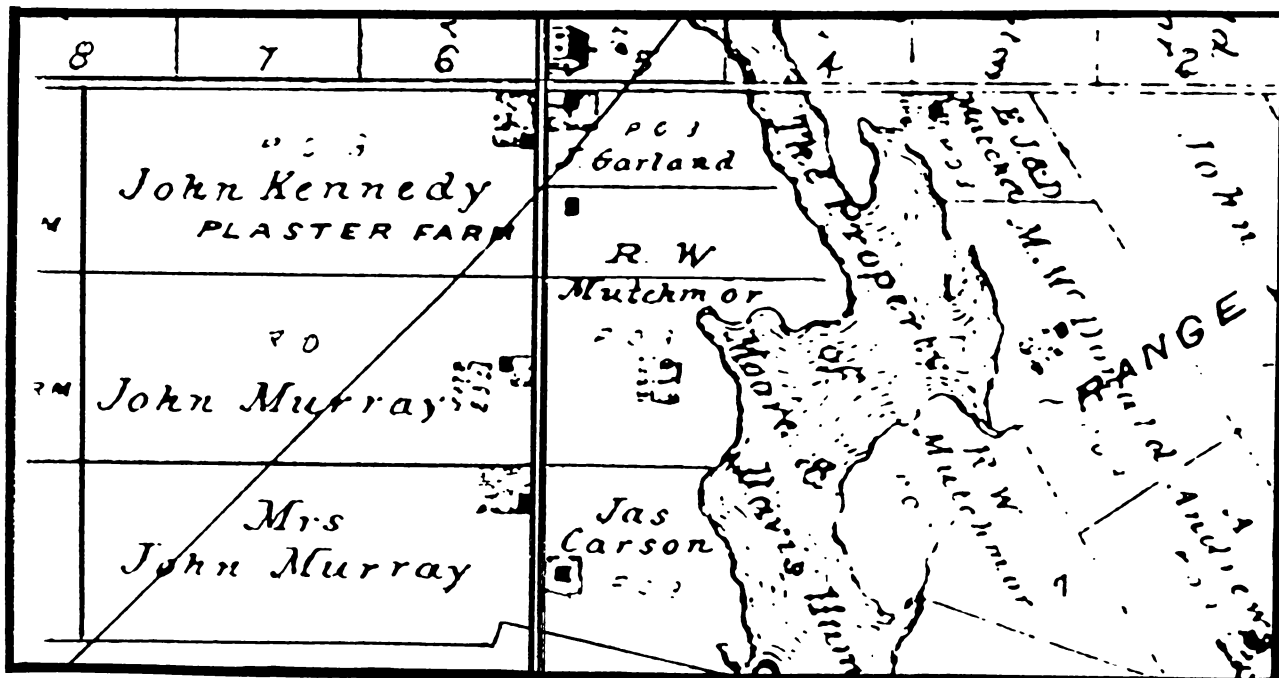
My research led me to Caledonia where I visited with Vera McMorran, the "keeper of the books" for Willow Grove Women's Institute. Women's Institutes across Canada have for many years collected their local history. This tradition was started by Lady Tweedsmuir, wife of Canada's Governor-General. These local histories provide a valuable wealth of local information.

Willow Grove is a small rural community located southwest of Caledonia close to the gypsum mines operated by Garland, Carson, and Mutchmore.

Vera explained she grew up at Willow Grove and her father, Ed Edmonson, worked at the mine at Hagersville in the 1930's until he retired. When the Lythmore mine closed, the operators at Hagersville got the generators and her father rewound them to use at their new mine. She had some information about the mines near Willow Grove, including four old photos which she allowed me to copy for our archives.

The pictures show three men, two of whom we assume were William "Miner" Smith and his son Frank. One photo, taken in winter, shows the opening of the shaft with a wooden roof over it and rails leading out of it. Another shows a mining shack, perhaps the home of one of the miners or an office and workshop, with three men standing outside on the deck beside chairs covered with snow. The other two pictures show the opening of a mine about four feet high, one with two miners crouched sitting on a pile of rocks - not very comfortable looking!

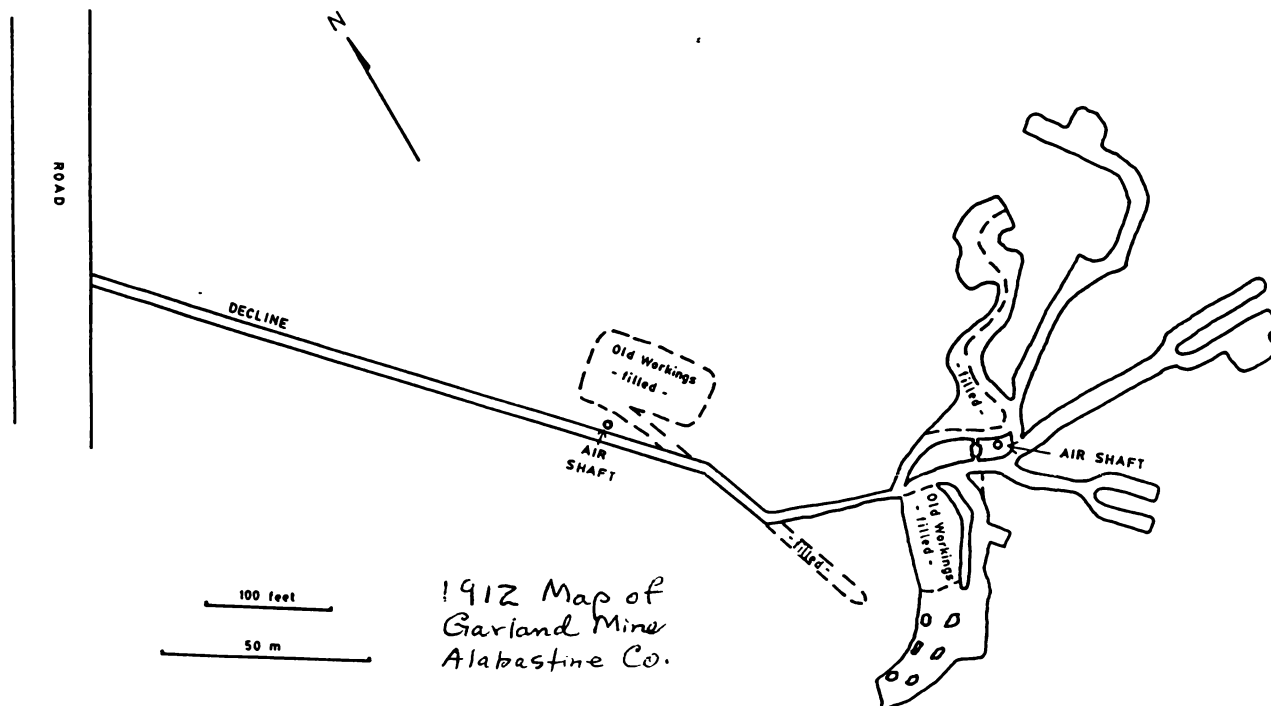
Continuing the research, I located in the *Historical Atlas of Haldimand and Norfolk Counties, Illustrated, 1887-9*, a map with John Kennedy's plaster farm south of McGowan Road and on the west side of the 5th Line. Across the road to the east were properties owned by Garland, Mutchmor and Carson. Buildings were marked on each of these properties, some possibly being Miner Smith's house which we were told was in the area. See below:

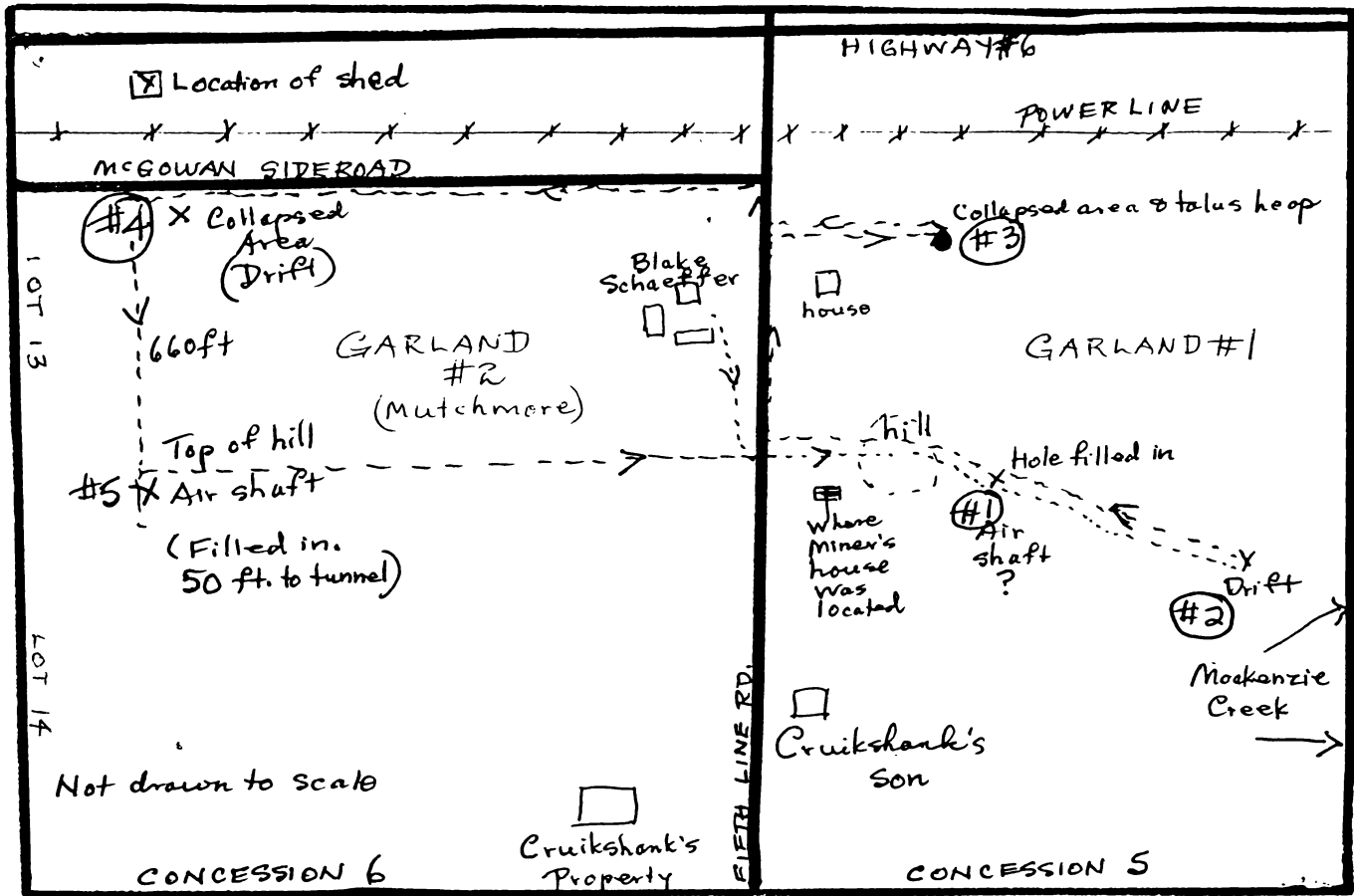


The following Saturday, a gorgeous warm, sunny October day, armed with our research, we headed in the direction of Harold Cruikshank's farm on 5th Line Road off Highway 6. When we arrived, Harold met us on the road, perched on his tractor and pulling a farm wagon. We parked our vehicles in Schaeffer's yard and hopped onto the wagon to tour the fields to five sites on his and Blake Schaeffer's farm.

Harold explained to us what he remembered about the mines from his youth in the forties. We told him what information we had and pieced it all together. Little remains today to show that the mines were there.

I have included a drawing of Garland #1 Mine, and have also drawn a composite map from the various sources mentioned to show you the findings from various sources.





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. Please send **correspondence** to Jean Farquharson, R.R.3, Paris ON N3L 3E3. Phone 519/442-2156. Fax 519/442-2373. For **membership inquiries**, contact Ilse Kraemer, 23 KingsHill Lane, Brantford ON N3T 6A3. Phone 519-756-6634.
