

The Clayton/Deer Park Historical Society is a group of individuals dedicated to the preservation of the history of the area just north of Spokane, Washington. The Society collects oral, literary, and pictorial history to publish and otherwise make accessible to the public.

The Clayton/Deer Park Historical Society meets on the second Saturday of each month at 9 AM. We gather at the Clayton Drive-In, located just off Highway 395 on Railroad Ave.

THE

CLAYTON/DEER PARK  
HISTORICAL SOCIETY

# Mortarboard

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## SILICA MINING NEAR HALF MOON PRAIRIE

PETER COFFIN

Free — Take One

### INTRODUCTION

In the last half of the nineteenth century gold discovery in eastern Washington near Colville and northern Idaho generated much prospecting activity. Rocks with iron staining or massive quartz outcrops were thought to have potential for holding deposits of valuable minerals. The hills west of Half Moon Prairie had an outcropping of white quartz that prospectors thought had a chance of containing gold ore. As a result of this a placer claim was made over the outcrop and named the “Indian Claim”<sup>1</sup>.

No gold was found but the claim on the hill in the center of the NE/4 of Section 14 TWP-27-N RGE-42-E covered a deposit of very pure quartz (silica, SiO<sub>2</sub>). Newspaper articles indicate that the quartz was mined in an open pit on the north side of the hill and some of the ore was shipped out in World War I<sup>2</sup>. Apparently mining continued into the late 1920’s when the National Lime, Chemical and Mining Corporation acquired the mine and

indicated they would spend \$65,000 for buildings and machinery to crush the rock<sup>3</sup>.

### DEVELOPMENT OF THE MINE

Serious development of the deposit began in 1926 well after the beginnings of mining in the period during World War I. At that time the National Lime, Chemical and Mining Corporation had been looking for a market for the silica. They apparently found a market in England where it would be used in the manufacture of glassware. Several other uses for the silica were considered including fillers in soap, rubber, and paint, silica firebrick as well as foundry core sand. Their plan was to mine the quartz, crush it, and haul it to the Great Northern Railroad siding at Denison where it would be loaded on railroad cars for shipment. The company was planning to crush the rock to flour and take advantage of the \$65/ton flour price compared to the \$7.50/ton price for the raw material<sup>3</sup>.

This mining and milling continued into the 1930s when it was reported that Inland Silica Com-

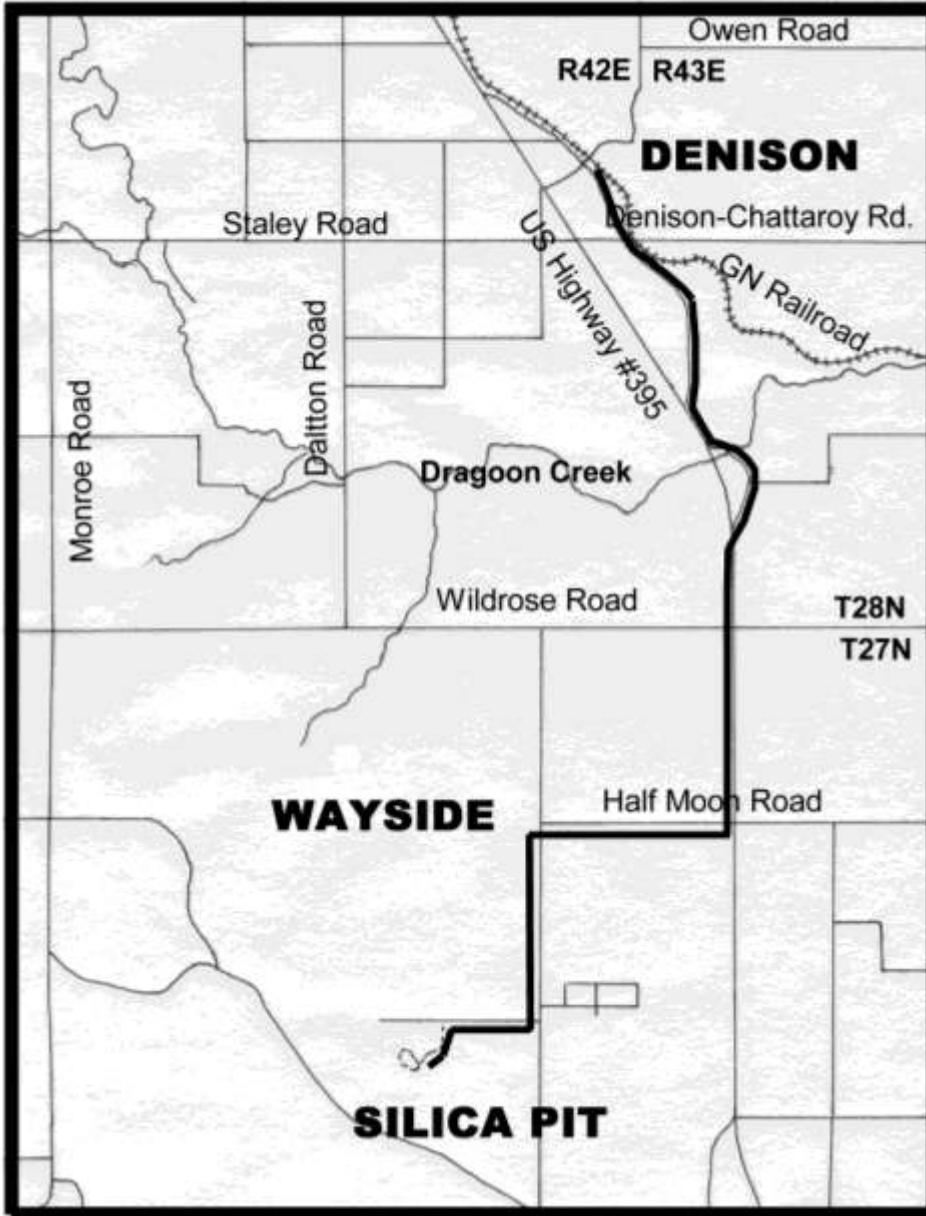


Figure 1: Map locating the Half Moon Prairie silica mine. The heavy line follows the haul route from the mine to the loading dock in Denison.



**Figure 2: The two bay bunkers may have been built either by the National Chemical and Lime Company or the Gladding McBean Company in the late 1920s or 1930s. This picture was taken in the early 1940s. (Melvin Mullenix Photograph)**

## PACIFIC SILICA MINING

After Pacific Silica Company purchased the mine they began an extensive development program. They installed a new crusher, vibrating screens and a hammer mill crusher. They planned to increase shipments of 200 tons per day to 500 tons per day in a fairly short time. The Rural Electrification Administration had installed a 300 kva capacity transformer at the mine and an 1885 foot power

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pany was shipping out the quartz<sup>4</sup> and that in 1931 that E. C. Grafmiller and Joe Proctor had the hauling contract. By 1941 the mine was owned by the Gladding McBean Company. In January 1942 they sold the mine to the Pacific Silica Company who estimated that the mine contained over 20 million tons of recoverable ore.



**Figure 3: Albert Page loading dynamite into drill holes in the pit wall. (Melvin Mullenix Photograph)**

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**Figure 4: Shovel loading operations in the pit after the wall rock had been loosened by dynamite.**  
*(Melvin Mullenix Photograph)*

transmission line was built to carry the 7200 volt electric power to the mine. This voltage was then converted to operate the mine's 440 volt electric motors. Spokane County was approached to improve three-eighths of a mile of road from the mine to Austin for the haul. Cost of this construction was estimated at \$1000 and it is uncertain if the County or Pacific Silica Company paid for the improvement<sup>5</sup>.

Mining in the pit began by drilling "coyote" holes in east side of the hill to break up the rock. The drilling was done with a Boles diamond drill powered by a 275 cubic feet per minute Ingersoll-Rand air compressor. This drilling setup was capable of drilling 1500 foot holes. Dynamite was placed in the holes and sacks of sand were packed in the holes to help concentrate the explosion energy in the rock. This method did not break the

rock into the needed small fragments and a large steel ball was used to shatter the larger boulders.

Plans were made to move the rock to the crusher by a drag line bucket but later pictures indicate the rock was moved from the pit to the crusher by dump trucks.

The rock was then run across a grizzly which removed overly large pieces for further processing and allowing the other material to drop onto a hopper above a conveyor belt. The conveyor belt carried the material into an Aurora crusher powered by a 50 horsepower motor. From that crusher the material dropped onto a vibrator screen where pieces from seven-eighths to minus four inch were dropped into a bunker for shipment to Portland, Oregon, for use in the manufacture of stainless steel and other ferro-silicon alloys. The less than seven-eighths material was crushed by a Brainard hammer  
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mill that was powered by a seventy five horse power motor. The material from this crushing was then screened into bunkers holding various sized finer rock particles to be used for glass making sand, sand blasting and foundry molds<sup>5</sup>.

The crushed coarse rock and finer screened material was hauled by truck to Denison and a Great Northern Railroad loading dock for shipment. The loading dock had

been built at a cost of \$1200 in the early 1940s. During the 1940s and 1950s Cecil Mullenix had the contract to truck the silica ore to the railroad.

Pictures in this article are from the collection of Mr. Mullenix's son Melvin. During the last years of the mining operations Melvin drove truck for his father.



**Figure 5: The crusher building is at the top of the picture where an elevated dump truck bed can be seen dumping ore into the crusher. The open framed buildings contained the vibrating screens that sorted the ore. The bunker at the far left held the finer material, bunkers to the right held increasingly coarse ore. The long handle at the right side of the base of the bunkers was the lever to open the bunker to the trucks below. The pit is over the hill in the background. (Melvin Mullenix Photograph)**

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**Figure 6: A Cecil Mullenix truck being loaded by a diesel shovel. What material is being loaded may be overburden as the ore was loaded from bunkers below the crusher-screening building. (Melvin Mullenix Photograph)**

and contained 97.8 to 99.4 percent silica (Valentine, 1949, p. 113).

## **END OF MINING**

When the quartz pegmatite vein was mined out in the late 1950s mining in this pit ended. For years a white scar on the hill west of United States Highway 395 and across Half Moon Prai-

Unfortunately the mining of the silica rock took a life. Frank Sicilia was crushed under the steel crawler tread of a massive loading shovel<sup>6</sup>.

## **GEOLOGY OF THE SILICA DEPOSIT**

A Washington State Division of Mines and Geology report on the deposit indicates that it was named “Denison” or “Latshaw” and formed a hill 200 feet high and 500 feet wide. The ore was classified as pegmatite quartz segregation in a granitic host. The quartz was white to clear



**Figure 7: Mullenix truck lineup near the pit. At this time the Mullenix trucks were mainly Whites with an occasional Reo or International. (Melvin Mullenix Photograph)**

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rice could be seen. Since that time trees, bushes, and grass growth have hidden the pit from view.

### **PRESENT DAY CAUTIONS**

All mining areas are dangerous and should be avoided. The silica mine location is a huge pit over 100 feet deep with very steep walls. A fall from the pit edge would most likely be fatal! The present owner of the area including the silica mine does not want people visiting the mine and wants everyone to heed the no trespassing signs he has erected and avoid the dogs guarding his property.

### **NOTES**

1. Deer Park Union, January 13, 1927, Front page.  
Article gives details of the National Lime, Chemical and Mining Corporation's plans for the silica deposit.

2. Northwest Mining News, March 13, 1942, Page 3. Much of this paper is derived from this article which details Pacific Silica's development program.
3. Deer Park Union, January 13, 1927, Front Page.
4. Deer Park Union, October 8, 1931, Front Page.  
This article contains a short note about the mine in the "Denison" report.
5. Deer Park Union, April 9, 1942, Front Page.  
This article is almost the same as the Northwest Mining News article.
6. Deer Park Union, May 27, 1943, Front Page.  
Describes how Mr. Sicilia was crushed and killed.

### **REFERENCES**

Valentine, G. M., 1949, Inventory of Washington Minerals; Part I, Nonmetallic Minerals: Washington Division of Mines and Geology Bull. 37, p. 93.

## **UPDATE ON THE E. E. WILLIAMSON FAMILY**

### **CHARLES STEWART, BILL SEBRIGHT AND SHARON CLARK**

The 1920 Census shows Elmer E. Williamson and Lalia L. Williamson at home in Clayton, Stevens County, Washington. Two children are listed with them: Bernice and Horis Porter Williamson: ages 11 and 9, respectively.

The 1930 Census lists Elmer E (48), Lalia C. (50) and Porter H. (19) Williamson. Bernice is not mentioned.

The 1940 Census lists Williamson, Lelia as head of the house, age 60 and divorced. Williamson, Elmer is listed as Hired Hand, age 59, and divorced.

Lalia C. Porter was born in December of 1875 in Shedd, Linn County Oregon. At age 24, her home

was in Shedd, Oregon, and she was single and a niece of Frank Clingman.

Bernice Williamson, born November 1, 1908, is mentioned in the 1915, 1916, 1919, and 1920 Clayton School Censuses.

Porter Horice Williamson, born June 30, 1910, is also listed in the 1916, 1919, and 1920 Clayton School Censuses.

**The following article January 18, 1934, edition of the *Deer Park Union*:**

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In the 1924 Clayton Grade School Sixth and Seventh Grade picture, above, Porter Williamson is in the front row second from the right. Paul Gibson is in the back row with his head turned to the right, 2 to the right are Paul Berger and Walt King. Mrs. Falk is the teacher seated at the right.

To the right is an enlarged picture of Porter from the above picture.

### **PORTER H. WILLIAMSON VICTIM OF PERITONITIS**

*Friends of Porter Williamson, 23 year old son, of Mr. and Mrs. E.E. Williamson of Clayton, were shocked to learn of his sudden death in a Spokane hospital on Saturday, following peritonitis, induced by a ruptured appendix. He was working in a logging camp when stricken and was rushed to the hospital, but the illness had progressed too far to be checked. The body was brought to the Lambert Mortuary, and the funeral services were held from the chapel, G.H. Rice of the Open Door church officiating and music being furnished by a group of friends from Clayton. Interment was made in the Woodland cemetery.*

*The deceased had resided with his parents on the home farm near Clayton during the greater part of his life, and received his high school training in the Deer Park schools. He was well known and enjoyed a large circle of friends in his home town. Surviving relatives are his parents,*

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and a sister, Bernice. Deer Park Union January 18, 1934.

The date of Porter's death was January 14, 1934.

U.S. World War II Draft Registration Card, 1942 records show that Elmer E. Williamson lived 3 miles northwest of Clayton, Stevens County, Washington, on a rural free delivery route. The records also show that he was 60 years old, was born June 26, 1881, in Pittsboro, Indiana, and was an unemployed farmer. The "Name and address of Person who will always know your address" was Mrs. Bernice Meyer, Seattle Heights, Seattle, Washington.

Chuck Stewart, Sharon Clark and I have made some conclusions. First, the young woman in the picture from Mortarboard # 49 is Laila Porter (her maiden name) probably before she became Mrs. E. E. Williamson. We believe the picture was taken in Shedd, Oregon, and that the other people in the picture are her uncle, Mr. Frank Clingman, and her grandmother, Lavina Clingman.

Second, she was the friend of Chuck's Grandmother Emma Stewart. They would have been about 70- 75 years old in 1950. Chuck remembers her as a friendly, stout, chatty lady in dark clothes and "sensible shoes."

Third, Bernice and Porter were the children of Elmer and Laila Williamson.

Fourth, the Williamsons divorced sometime between 1930 and 1940.

There are many questions still left unanswered. First, when did they divorce and was Porter's death a contribution factor?

Second, when and where did Laila, Elmer, and Bernice die?

Third, could the 2 Williamson properties listed in the 1933 Land Ownership map be a result of the divorce?

Fifth, the draft records seem to show Bernice married a man named Meyer and lived in Seattle. What became of Bernice?

#### **Further Research:**

In 1880, the family of Cyrus Clingman, 56, Lavina Clingman, 45, Francis (Frank) Clingman, 15, and Lydia Clingman lived in Halsey, Linn County, Ore-



**Above is a photo of Ellenora Clingman Porter Crewe Platt, mother of Lavinia "Lalia" Porter Williamson. Photo from Ancestry**

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gon adjacent to their daughter, Ellenora Porter, 23, married, and Levina Porter, 3.

Ellenora's ex-husband, Thomas Porter, 29, divorced, dry goods merchant, was enumerated with a group of 19 people in the same town, suggesting he was living in a hotel or boarding house. His family tree gives his birth at October 21, 1850, his divorce from Ellenora Clingman, 1880, Linn Co. Oregon, his marriage to Mattie Hill in 1881. Two children were born to this marriage: Delia Porter and John D. Porter. Thomas L. Porter died September 13, 1885 at age 34.

Ellenora was married, second, to David Crewse, January 29, 1888. In 1900, David and Ellenora Crewse were living in Fairfield, Spokane County, Washington, with the following children: Milliscent, 15, Lydia R, 10, Earl T Crewse 8, and Cyrus Glen Crewse, 5. David Crewse died in Adams County, December 2, 1907, age 49.

In 1910, Ellenora Crewse, 52 widow, was living in Clayton, Spokane, Washington with the following children: Earl 18, Sirus G. (Cyrus Glen) 15, and Imogene Crewse (9). Earl and Cyrus were both teaming, hauling wood per the 1910 census.

Ellenora Crewse and Henry J Platt were married July 17, 1912 in Stevens County, Washington. However, Henry J Platt, age 64, Squaw Creek, Stevens County, Washington, says he is divorced on the 1920 Federal Census and Ellenora Crewse is living with her brother, Frank Clingman, mother,

Lavina Clingman and her youngest daughter, Imogene Crewse in Linn County Oregon.

Frank Clingman dies in 1920, his mother, Lavina in 1925. Ellenora lives to 13 Apr 1940. Her daughter, Imogene is with her in the 1940 census.

Why did Lalia live with her uncle and grandmother? Sharon thinks there may be a couple of reasons. 1. Her mother is divorced and soon remarries and has more children. 2. Her aunt Lydia who is about Lalia's age dies in 1889 at age 13.

How did she get her name? Lalia's birth name was Lavina, the same name as her grandmother's name. She probably was given a nickname to avoid confusion.

Lalia is the only child of her parent's marriage but she has two half-siblings from her father's second marriage and five from her mother's second marriage.

Cyrus Glen Crewse, half-brother and Lydia Markham, half-sister were living in Colville in 1942 (WWII draft registration.). Earl Keith Crewse was working at Boeing in Seattle and his wife, Mrs. Clare Crewse was living in Yakima in 1942 (WWII draft registration.)

In the 1940 census, Bernice Meyer, wife of August W. Meyer, lived in Honolulu, Hawaii.

**As you read this, if you have information to help answer any of these questions, please contact us.**

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<b>Clayton/Deer Park Historical Society Minutes — July 14, 2012</b>
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In attendance: Mary Jo Reiter, Kay Parkin, Mark Wagner, Pete Coffin, Judy Coffin, Bill Sebright, Bob Clouse, Carol Walter, Sharon Clark, Kay Parkin, Penny Hutten, Roxanne Camp, Allan

Fackenthall, Lynn Wells, Betty Burdette, Marilyn Reilly, and Tom Costigan.

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Society President, Bill Sebright called the meeting to order at 9:00 AM. 1) Bill made arrangements to have a booth at Settlers and at the Clayton Grange for Clayton Day.

Treasurer, Mark Wagner reported that there is \$3,048.57 in the main checking account. There was \$25.00 in deposits. There were 2 checks written: \$169.10 to Sharon Clark for supplies and \$46.70 to Bill Sebright for bindings. The service fee of \$17.00 Mark will cover. The web hosting account had 228.31 in withdrawals. They were 10.95 monthly hosting fee and the web back up fee of 107.40. This is an annual fee that comes due in June.

Secretary, Grace Hubal had no report.

Vice President, Pete Coffin reported that he:

- 1) Submitted a manuscript on the source of the name Dragoon Creek.
- 2) Submitted a revised manuscript for Silica Mining on Half Moon Prairie.
- 3) Has been researching Arcadia Orchard's water use and the varying levels of Loon Lake in regards what I think is the myth that the Orchard Company failed by losing the use of lake water. Much data was acquired from Larry Benson of the surveying firm Ramer and Associates. From this data several letters have been writing inquiring about more information. A letter to the Department of Natural Resources revealed that they had no records prior to 1950. As yet there has been no response to a letter to the Spokane Superior Court concerning the possibility of court actions against the Arcadia Orchard Company in the time period 1910 to 1925 and a 1949 injunction that seems to set the lake level for real estate purposes. Loon Lake levels have varied considerably (possibly over 6' lower from the original lake level) since prior to 1889 when the rock cut was dynamited on the north side of the lake to lower the level to create more farmland on the northwest side.
- 4) Made a trip to the Spokane County Engineering Department's basement to collect some maps of the Arcadia Orchards revealed that their collection includes mechanical drawings

of portions of the physical plants as well as maps showing where various varieties of apples were planted. Interestingly, cross-section drawings of the tunnel driven south out of Loon Lake show a large diameter bore of about 2000 feet in length. 5) Has reviewed issues of the *Deer Park Union/Tribune* from 1911 through 1950 and made notes for use as a history subject index. 6) Provided data to Congregational Church researchers about World War I veterans who were church members listed on a recently discovered plaque. 7) Provided a large number of historic *Deer Park Union* clippings to an individual who is working on some sort of history of the local power company which led to correction of the caption on Lawrence Zimmerman's photograph of the Little Spokane Power Plant. 8) Has not had a response from KSPS people about using the Arcadia Orchard film and the Dr. John Fahey manuscript "Selling the Watered West" as a documentary film subject. 9) Sent a picture of the Arcadia dignitaries riding in an open car from the 1913 Keith album to Tom Costigan to be used in "History Quiz of the Week."

Bob Clouse reported that he has the only original photograph of David Thompson. There was discussion whether it is a painting or photograph. An interesting point to follow up on is where on the CDPHS website the photo is located? A link to finding out more information on David Thompson is: [www.nisbet.com](http://www.nisbet.com).

Print Editor, Sharon Clark reported: 1) The July 2012 Mortarboard, #51, was distributed. 2) She shared information on David Thompson and his travels which took him across the stream that connects Fan Lake and Eloika Lake.

Webmaster Penny Hutten reported: Not much has changed in the CDPHS website, except changes were made to the "Westby's Spotted Road," by the direction of Ken Westby. Editor of *The Deer Park Tribune*, Tom Costigan was a guest.

Settlers' Day is on July 28.

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Clayton Day is on August 4. Selection of Grand Marshal was discussed. It was decided it would be Bob Clouse and Bob Gibson. Bob Clouse agreed. Taffy Long will check with Bob Gibson. Clayton Fair is on August 24-26.

Next meeting is Saturday, August 11, 9 AM, Clayton Drive-In.  
Meeting adjourned at 9:43am.  
The meeting minutes submitted by Grace Hubal, Secretary.

### Editorial Policy Regarding Correcting Errors and/or Omissions

Information published here is compiled from many sources, including personal memories. It is often difficult or impossible to verify such recollections through outside documentation. Our editorial policy toward the veracity of personal recollections tends toward the casual – since little harm is normally done by such errors. But our editorial process also invites public review and input regarding the accuracy of the information we publish, and when such review either suggests or reveals errors or items open to dispute our “Letters” department will act as a forum allowing the airing of such disagreements in an effort to ascertain the truth and correct any probable or demonstrated errors. We also believe it’s important that such disagreements be recorded, even if they can’t be settled to the satisfaction of all parties.

We encourage everyone to submit any arguments as to fact to the editor in writing — since the written form reduces the chance of further misunderstandings. As is standard policy, all letters will be edited for spelling, word usage, clarity, and — if necessary — contents. If advisable, the editor will confer directly with the letter writers to insure that everyone’s comments and corrections are submitted in a literate, polite, and compelling manner — as best suits the editorial image of this Society’s publications.

### Society Want Ads

**WANTED:** Information and photos regarding the history of the Brickyard/Ramble In Tavern

tion with their occupations and settlement in the Clayton/Deer Park Area

Gardenspot #278 Granges

**WANTED:** Any stories and photos of your family’s history in connec-

**WANTED:** Any stories and photos from Williams Valley #452 and

**WANTED:** Any information on the Williams Valley Grange Orchestra  
Contact: Ann Fackenthal, WVG

#### Society Contacts

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Special Thanks to this month's volunteer proofreaders —