

The following was received from Jeri L. Jones after this Editor's personal request to individual members for articles for the Newsletter.

Brief History and Mineralogy of the Dillsburg
Iron Mines, York County, Pennsylvania

INTRODUCTION: The Dillsburg iron ore fields, located approximately 1.25 miles east of Dillsburg, Pennsylvania, was one of York County's leading iron ore districts. This area covers about 0.75 square miles and is located in the northeast sector of the U.S. Geological Survey Dillsburg 7.5' Quadrangle. At least nine mines produced over 1.5 million tons of iron ore between 1828 and 1888 (Spencer, 1908). The ore, in the form of magnetite, was hauled by horse and wagon to Dillsburg, where it was distributed and used in various furnaces in southeastern Pennsylvania (Frazer, 1877). Several of the largenst operations included the Logan (also known as the Longnecker), Underwood, McCormick, Smyser, King, Washington and the Jauss Mine (Frazer, 1877; Spencer, 1908).

GEOLOGY: The area under discussion is situated near the western edge of the Gettysburg Triassic Basin, which forms a belt approximately 15 miles wide through York County (Stose and Jonas, 1939, pl.1). Reddish-brown limestones, sandstones and shales of the Gettysburg Formation occur in the vicinity of the mines. Diabase has intruded these sedimentary rocks, forming most of the minerals found at Dillsburg. This deposit has been classified by Spencer (1908) in his famous report as a Cornwall (Pennsylvania) type deposit similar to that of the famous Cornwall Mine in Lebanon County, the Grace and Jones Mines in Berks County and the French Creek Mine in Chester County. For further reading on the history, geology and origin of the Dillsburg occurrence, see Frazer (1877), Spencer (1908; 1910), Harder (1910), Stose and Jonas (1939), Hotz (1950) and Stose (1953).

MINERALOGY: Although Genth (1876), Frazer (1877), and Spencer (1908; 1910) and others described the mineralogy of this area, this area was relatively unknown to mineralogists until 1973, when Dr. Robert C. Smith, II, of the Pennsylvania Geologic Survey, visited the area and identified datolite from the dumps of the Logan Mine. Since that time, the popularity of mineral collecting there has grown rapidly, and has recently been described by Geyer and others (1976, p. 218-221). Until recently, twelve minerals have been identified from the area. Although the minerals were listed by Geyer and others; below is an updated list of the mineralogy of the Dillsburg iron mines.

ANDRADITE: dodecahedrons in diabase and rarely in limestone
CALCITE: white cleavages and rare crystals in limestone
CHALCOPYRITE: brassy yellow masses in sandstone and limestone
CHLORITE Group: species unknown; bluish-green hexagonal crystals
DATOLITE: clear to very light green grains and crystals up to 4 mm
FLUORAPATITE: white hexagonal prisms; identified by Smith (1978)
LIMONITE: reddish-brown to yellowish grains in sandstone and limestone; often coating chalcopyrite and pyrite

HEMATITE (specular): plates up to $\frac{1}{2}$ inch in size in limestone
 MAGNETITE: shiny, black masses and octahedrons in blebs in limestone and sandstone; often associated with datolite
 MALACHITE: green coatings and stains on and surrounding chalcopyrite
 MUSCOVITE: small, violet colored plates
 ORTHOCLASE: small, flesh to white crystals; often associated with datolite and magnetite
 PYRITE: small cubes and pyritohedrons; often in limonitic sandstone
 QUARTZ: small, clear pyramidal crystals usually associated with magnetite
 SPHALERITE: small, orange, distorted tetrahedrons associated with datolite

During a recent field investigation to this area, as a part of a study of the mineralogy of York County (Jones and Goodman, in preparation), outcrops and various mine dumps were examined. Compared with the other mines in the area, the best collecting is located in the vicinity of the Logan Mine. To describe all of the various dumps, pits and outcrops just in the vicinity of the Logan shaft would require a complete chapter; but described below are several key locations that may be of interest to the reader.

An abandoned railroad bed is located immediately north of the shaft, extending northward several hundred feet. All of the minerals listed above can be found here with a little effort. It should be pointed out, here, that the rocks found in the southern half of this bed are more limonitic compared to those rocks in the northern half.

A large dump of some interest is located immediately east of the shaft, extending northward several hundred feet. The largest datolite crystals reported from this area were found here, measuring up to 4 mm. These crystals were underlying a small calcite lens. Micro crystals of epidote and orthoclase also occur here.

A small exploration pit located approximately 275 feet northeast of the water-filled shaft contains large, well formed magnetite octahedrons, pyrite cubes and pyritohedrons and rare sphalerite. This sphalerite was first reported and verified from the Dillsburg area (Dr. Robert C. Smith, II, personal communication, 1978). Datolite crystals, similar to those collected just southwest of this pit and in another larger pit to the west-southwest.

Jeri L. Jones
 Jimell Goodman

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Editor's Note: In preparing this article for printing, the listing of the minerals found at this locale was mixed. Our apologies to the authors.

Personal correspondence of 3/23/79....

After the writing of the mineral sphalerite from the Longnecker Mine, Dillsburg, PA (this issue), a new mineral for this locality was discovered by the writers. During a recent field trip to the area on March 11, 1979, selenite was observed on the dumps of the Longnecker Mine.

Selenite is not uncommon to the Cornwall-type deposits. It was described by previous geologists from the Cornwall, Jones, French Creek and the Wheatley Mines. Dillsburg can now be added to that list.

The Dillsburg selenite is colorless to white in color and occurs as prismatic, wedge-shaped radiating crystals. Most of the selenite was found on

the exposed, weathered surface of the greenish sandstones and limestones, usually containing magnetite, orthoclase, datolite and epidote. These crystals averaged in length of 0.5-0.75 mm. Dr. Robert C. Smith, II, of the Pennsylvania Geologic Survey, tentively identified the selenite on optical analysis. Further analyses of the selenite is expected in the future.

Being a Cornwall-type deposit, there is still much work to be done in the Dillsburg area. More minerals probably occur there, so if you have collected at Dillsburg or collect in the future, keep your eyes open for a new mineral. If you have any questions, comments or specimens which you would like identified from Dillsburg, don't be afraid to contact the authors.

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We welcome the following new and honorary members to the Pennsylvania Chapter.

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John W. LaBOLD
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When the last Pennsylvania Chapter of Friends of Mineralogy Newsletter arrived in the mail, the editor wrote a note asking me if I would care to try my hand at writing something for the Newsletter. Recalling conversations I've had with some FM members regarding photography, I suggested a regular column on the subject of photography. Pen thought the idea had some merit, so here we go with installment #1 of -?-. Suggested titles are welcome.

Where to start? My initial goals are to:

- (1) provide information spelling out in detail techniques presently being used by members, and by individuals outside of PA-FM whose photographs of mineral specimens are available to be viewed, studied and admired;
- (2) provide up-to-date information on fild, equipment, do's and don'ts;
- (3) pattern the column after the late Neil Yedlin's column on micro-mounting; that is, combine goals (1) and (2) into an easily accessible, down-to-earth useful source of information.

Perhaps those of you who do not have an interest in photography are wondering what use this information could be to you? One very important thing which comes to mind is lighting. Lighting is perhaps the most important element for taking a good photograph and for displaying your specimens. If you were to apply those factors which create a pleasing photograph to the specimens in your display case, you would find that your specimens would be more pleasing to view as well.

So, to end this initial installment, I'd like to request information from the membership. Write to me at the following address and let me know what and how you're doing in the photographic end of mineral collecting, so that I may pass the information on to everyone.

George W. Buchanan
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Telford, PA 18969

The following is from Martin Anne:

To all the members:

I wish to thank all of you for making it possible for me to have received the Life Membership Award. I would like to list each one who helped make this possible, but don't have space in this Newsletter. I do want to name some without whose support I would not have received this award - Dr. Arthur Montgomery, Dr. Davis Lapham, Donald Hoff, Dr. Ray Grant, Dr. Robert Smith, II, Dr. John Way, Donald Schmerling, Jay Lininger, Bryon Brookmyer, Edward Carper, Tom O'Neil, Penrose Ambler, Delbert Oswald, Catherine Mur-etic and Col. Thomas Myers. Above all, I thank Ann Anne, my understanding wife, without whose cooperation and support of the time I spent on FM projects, I could never have achieved this award.

Friends of Mineralogy would not exist without all the members helping. This organization works because of the efforts of both the professional and the amateur. I only hope and pray that, although we have disagreements from time to time, that FM members can rise above these disagreements and continue to make Pennsylvania Chapter - Friends of Mineralogy the best in the country. I look forward to the upcoming years with pride and optimism for this Chapter.

Again, thanks.

"Marty"

Editor's Note: Not one of us can say that Martin is resting on his laurels after the painstaking and time consuming job that Martin and Ann did on the registration for the recent Cornwall Conference. Thank you, Martin and Ann for all your efforts in helping make the Cornwall Conference a great success.

MESSAGE FROM THE CHAIRMAN:

During the last 12 years of collecting minerals, I've noticed many changes in the attitudes of collectors, their ideas and interests. It might be referred to as an evaluation of the collector.

At the start of my collecting, everyone went to quarries. If a specimen wasn't big, it wasn't beautiful; and those that were huge in size were museum specimens. If you couldn't determine what it was that you found, give it a name (something catchy); and if a specimen looked strange, it must be a new species. Mineral shows had displays of assorted minerals, rocks, wood carvings, pictures of the family dog from various locations, with nothing in common, including labels - if any at all.

Certainly there are many exceptions to these generalizations, but I have heard and seen them and am guilty of perpetuating them.

Much has changed since these beginning years with other collectors and myself. Collectors still collect in quarries, along with just about any other place imaginable. Many favor micros to macros. Many make effort to determine what they are observing. Shows now have exhibits that are entertaining as well as educational for the collector and the public.

It is no surprise to me that these changes appear to coincide with the founding of FM and the establishment of its goals. Without the symposiums, publications and, above all, you, the FM members relating our goals to fellow collectors, we would not have progressed this far.

Since we are into the collecting and travelling season, I hope you will continue to share with others what this Chapter has accomplished. By doing so, you will be a Friend of Mineralogy.

Bryon Brookmyer

COMING EVENTS:

(From the Friends of Mineralogy Newsletter)

The Faylor-Middlecreek Company will be holding an open house to mineral clubs at the limestone quarry in Winfield, Pennsylvania on September 22, 1979. The quarry will be open to visitors who come equipped with hard hats, safety shoes, safety glasses, and a \$1.00 donation to defray expenses.

Symposium

The 7th symposium of the Pennsylvania Chapter, Friends of Mineralogy will be held on November 2, 3, and 4 at West Chester State College. The theme is - "A SYMPOSIUM FOR ALL COLLECTORS - NEOPHYTE AS WELL AS PROFESSIONAL". Friday evening, November 2, will be a get-together and swap session. Saturday, November 3, will be lectures, mineral auction and banquet; and Sunday, November 4, will be a field trip.

Registration prior to September 31, is \$8.00 (students - half price). After September 31, registration will cost \$10.00 and \$5.00. The separate fee for the banquet is \$8.00 (reservations for the banquet until September 31, only). Send registration fee and separate banquet fee; or write for more information to Martin L. Anne, 509 Maple Street, Wrightsville, PA 17368.