

# Nittany Mineralogical Society Bulletin

Nittany Mineralogical Society, Inc., meeting in State College, Pennsylvania  
Contact information on back page

May, 2021

Visit our web site: [www.nittanymineral.org](http://www.nittanymineral.org)

Editor (see back page):

David C. Glick

## May 19<sup>th</sup> Zoom meeting ONLINE:

### Evolution of a Fossil – *Arthropycus Alleghaniensis*: The story of the Jointed Seaweed

by Paul T. Fagley

Environmental Education Specialist, PA DCNR  
Greenwood Furnace State Park Complex



*Arthropycus alleghaniensis* trace fossils (Clinch Formation, Lower Silurian; Tennessee, USA). Photo by James St. John, <https://creativecommons.org/licenses/by/2.0/> (CC BY 2.0) <https://www.flickr.com/photos/jsjgeology/36846059001>

One of the more common trace fossils of ridges and valleys of Central Pennsylvania is the *Arthropycus alleghaniensis* of the Tuscarora sandstone formation. While most geologists and paleo-biologists consider it the feeding tracks of an unknown arthropod, there is still debate about whether it is a feeding trace, or perhaps an ancient seaweed or algae. This trace fossil was the first in North America to be scientifically named, and the type fossil was identified near Lewistown in Mifflin County. This program traces the historic investigations of this fossil over the past 200 years by many noted early geologists, and up to today with a potential tracemaker organism identified, also from Mifflin County.

Paul Fagley has presented programs and a field trip to NMS in the past, and we are pleased to welcome him to our virtual stage. He is a native of Mifflin County, a Penn State graduate, and has been employed as Environmental Education Specialist at Greenwood Furnace State Park since 1988. He has worked to establish an interpretive and education program centered on the Greenwood Iron

Works, now expanding to include the early forestry heritage of the area and the Juniata Iron District. He has extensive knowledge of the charcoal iron industry, of furnaces and forges in the Juniata Iron District, and of Greenwood Furnace, and has authored several papers on local industrial history. His skills in Living History portrayal, blacksmithing, historic woodworking, traditional charcoal-making, and other historic crafts have drawn many visitors to Greenwood Furnace.

**Please join us online for this presentation!** The Zoom link will be e-mailed to all paid members who receive our e-mails; others are welcome to request it by e-mailing <[xidg@verizon.net](mailto:xidg@verizon.net)>. We'll plan to start at 7:30 p.m.; we can have informal discussions, then we can do any questions & answers and announcements, and plan to start the presentation at 8:00 p.m. We will have some information on the main page of the web site as well.

-Editor

## Thanks to Many

President's Letter from Dave Glick

The start of the summer hiatus for this Bulletin seems like an opportune time to thank all of those who have helped NMS over the last year or so, especially during the COVID-19 pandemic. Program Chair Dr Duff Gold continued his usual efforts to find interesting programs; Ann Dunlavy, Dr Bob Altamura, Daniel Bontempo, and others helped connect us with out-of-town speakers. Thanks go to all of the speakers (listed under 'past programs' on our web site); some of the non-members have graciously declined to accept honoraria, and NMS has been pleased to make donations to the nonprofit organizations of others. Even before we started Zoom meetings, Dr Andrew Sicree provided two recorded presentations available on the web site. Dr Charles Miller, Jr. gave our last in-person program before lockdown, another via Zoom, and continued providing his much-appreciated illustrated Bulletin articles as well. John Dziak has organized all of the Zoom sessions which have allowed us to continue having meetings.

Shirley Fonda donated boxes of mineral and geology books. Tim Holtz donated several flats of fossils and a collection of local quartz crystals. Bob Cassarly donated many boxes of mineral publications which had come from the late Pen Ambler. John Crider arranged for collections from his parents, Don and the late Jo Ann Crider, to be donated to NMS in memory of their friend Pen Ambler. We will be

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**Thanks, continued from page 1**

providing sets of rock samples for a kids' program at Altoona Public Library; Mike Dunton collected and donated the majority of them. Dr Andrew Sicree arranged for us to receive several pieces of lapidary equipment and supplies. I'm sure I've forgotten some; please excuse that and understand that thanks are due to all. Finally, thanks to all Board members and all members for your patience during this difficult and awkward time. I hope will be back to some version of normal very soon!

### Dennis A. Zwigart 1945 - 2021

It is with sadness that we report that NMS member Dennis A. Zwigart passed away peacefully on January 28 at home after a short battle with cancer. He brought intelligence, good humor and energy to NMS and its meetings, and will be deeply missed. A full obituary is available at [legacy.com](http://legacy.com). Denny was born in Etna and grew up in Allison Park, in the Pittsburgh area. He is survived by his wife Karen and other family. He had attended Penn State and the University of Chicago, and worked for General Motors, Chemcut, Atotech, and General Electric, retiring at age 60.



A long-time NMS member, Denny drew notice when, just for fun and the pursuit of interesting knowledge, he undertook the Gemological Institute of America distance education training to earn diplomas as a Graduate Gemologist and Accredited Jewelry Professional, as well as in diamonds and colored stones. Denny sometimes reported on his progress at NMS meetings, and NMS members were pleased to help out to the extent we could by making connections for the various instruments and microscopes that he needed to use for parts of the GIA training.

The obituary further reports: "He was a man of many accomplishments, talents and travels. He was always interested in learning something new. He was a pilot, flying his hot air balloon, "Dream Maker," a licenced fixed wing pilot, and a GIA certified gemologist. He was a skilled sailor and loved trap shooting with friends Mike and Val. He loved riding his Harley! He volunteered with Clearwater Conservancy, becoming a Lifetime Member and serving on the Board. Most recently he volunteered with a local group that monitored water quality in the local streams... A Celebration of Life will be held in the summer." ❄

## Free online: Seventeenth Annual SINKANKAS SYMPOSIUM (VIRTUAL) AGATE and CHALCEDONY from <https://sinkankassymposium.net/>

Named for one of the most distinguished and influential figures in gemology and mineralogy, the Sinkankas Symposium is an annual event featuring presentations by noted specialists working in diverse gem-related disciplines.

The theme of the 17th Annual Sinkankas Symposium is Agate and Chalcedony and will be in a virtual format this year. The virtual experience will feature a menu of eight pre-recorded 30 to 40-minute exclusive presentations available to view on-demand from Saturday, April 24, 2021 until Monday, June 7, 2021 on the Sinkankas Eventbrite page. You will be required to register in order to have access to these presentations.

The annual event is co-sponsored by the Gemological Society of San Diego (GSSD) and the Gemological Institute of America (GIA). This year's symposium is in honor of Si Frazier and Ann Frazier who have dedicated their lives to the study of the science, history, and beauty of agate and chalcedony.

### FORMAT, REGISTRATION & TIMELINE

Eight 30 to 40-minute pre-recorded presentations will be available to browse on demand at the Sinkankas Symposium EventBrite web page.

REGISTRATION: Open Now, online only.  
<[2021-sinkankas-symposium.eventbrite.com](https://2021-sinkankas-symposium.eventbrite.com)>

COST: Free. Registration required

– SPEAKERS & TOPICS (subject to change without notice)

Tim Adams

Fabergé's Work with Agate and Chalcedony

Patrick Dreher

Dreher Carvings of Agates and Chalcedony

Dr. Peter Heaney

The Complex Mineralogy of Agates

William Larson

Collecting Crypto-crystalline Quartzes: A

Conversation with Bill

Dr. Cigdem Lüle

Chalcedonies of Anatolia: From Neolithic to Modern Day

Nathan Renfro

The Micro-World of Agate and Chalcedony

Dr. George R. Rossman

Cause of Color in Agate and Chalcedony

Robert Weldon

Challenges of Photographing Agates ❄

**Northern Alleghenies Geological Society**  
returns to in-person activities  
Buttermilk Falls, May 27

from the NAGS Officers

After a long hiatus, the Northern Alleghenies Geological Society is back! We hope you have all been doing well and have weathered the storm through these difficult times. We are returning to geological offering by putting together an outdoor program we are calling "Snacks on the Rocks". Snacks on the Rocks will be held on Thursday evening, May 27th 2021 at Buttermilk Falls Natural Area. The \$25 will get you: a picnic lunch prepared by Balance Restaurant; three presentations about the geology, wildlife, and botany of Buttermilk Falls; and 1.5 hrs of Professional Development Hour credits. This month's newsletter [available to NMS readers on request to David Glick <xidg@verizon.net>] has all the details. It is a great deal and I'm sure you have been itching for some scholarly activities just like us!

If you plan to join us for Snacks on the Rocks, please let Abby <abbyrweess912@gmail.com> know **before May 19th** so we can have an accurate total for meals.

**Geo-Sudoku**

by David Glick

This puzzle contains the letters ACEGHIRSV; one row or column includes the place where geological photos go for their old age . As usual, if you've read this issue, you've seen it. Each block of 9 squares, each row, and each column must contain each of the nine letters exactly once. The solution is on page 4.

	G			H	R		I	
	C			E		G	V	R
R	E			I	V			
	S	E	R	A		C		H
			V	C	E	S		
		C				R		
				S		V		
E		G			C			
I		S		V	H			

**Pennsylvania Geology Magazine**

Pennsylvania Geology magazine's first issue of 2021, vol. 51 no. 1, is now available via the list of issues at <[http://docs.dcnr.pa.gov/cs/groups/public/documents/document/dcnr\\_20033210.pdf](http://docs.dcnr.pa.gov/cs/groups/public/documents/document/dcnr_20033210.pdf)> (this link is available on the left sidebar of our web site's main page).

State Geologist Gale Blackmer reflects on how Survey personnel have continued their work during the pandemic. There have been retirements, and several new hires are forthcoming.

The featured geologic article in this issue is The Slab Cabin Run Watershed Study in Pennsylvania, With Applications to Instructional Courses, by Charles E. Miller, Jr. (Dr. Miller had presented a similar article in the NMS Bulletin in March 2020.)

There is yet more news on the increasing number of historical photographs available online. Survey Librarian Jody Smale reports a change in the digital repository software used to store and share them. "With *Islandora*, you can continue to search, view, and download photographs from the bureau's collection. Currently, there are more than 4,600 photographs available on the Islandora site (<https://digitalarchives.powerlibrary.org/papd/islandora/object/papd:spgsl-photo>); however, we continue to scan and upload photographs. Because of this, if the collection is accessed through the new link, even more images from the bureau's collection will be available. Please note that the previous version of the collection is still available online, but no new photographs are being added to that site, and the site will be taken down effective May 30, 2021."

The Book Review addresses the 1889 Report P4 of the Second Geological Survey of Pennsylvania. "The Dictionary includes and illustrates the broad range of fossil forms, including those from plants, animals, and trace fossils, known at the time to be from Pennsylvania and the surrounding region (but additionally from elsewhere if an association with Pennsylvania and its geology existed or could exist)... Despite sometimes outdated taxonomy and nomenclature, the Dictionary still has broad appeal due to its historical nature, comprehensive (for its time) coverage, and copious illustrations." This and most other publications of all four Surveys are available at the Pennsylvania Geology Collections webpage of The Pennsylvania State University Libraries <<https://libraries.psu.edu/about/collections/pennsylvania-geology>>. This link, and the updated link for photographs from the previous paragraph, have now been added to the left sidebar of the NMS web site main page. \*  
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**Cave Program at Arboretum on August 28:  
NMS Seeks Personnel**

Contact David Glick, NMS President

*We're planning to participate and are still looking for volunteers to help*

## FEDERATION NEWS

Nittany Mineralogical Society, Inc., is a member of EFMLS, the Eastern Federation of Mineralogical and Lapidary Societies, and therefore an affiliate of AFMS, the American Federation of Mineralogical Societies. The **Federations and our Society strongly encourage all members to read the monthly Federation Newsletters. The AFMS News is linked from our web site, www.nittanymineral.org .**

With the above being said, EFMLS has been in disarray for many months, with Board meetings and elections not being held, and two sets of people operating as though they were in charge. The group who control the web site are not posting a newsletter there. The other group report in their e-mailed newsletter that AFMS is considering expulsion of EFMLS for non-payment of dues. Perhaps this will promote some useful action.

The Syracuse, New York, show at which the EFMLS Convention was to be held has been cancelled due to pandemic restrictions.

The AFMS May issue is available on their web site. Cheryl Neary continues the geological travelogue of Wyoming. Plans continue for an in-person AFMS / Rocky Mountain FMS Convention June 17-21, 2021, in Big Piney, Wyoming.

Please see the AFMS Newsletters at <[http://www.amfed.org/afms\\_news.htm](http://www.amfed.org/afms_news.htm)> . *-Editor*

### Geo-Sudoku Solution

S	G	V	C	H	R	E	I	A
H	C	I	S	E	A	G	V	R
R	E	A	G	I	V	H	S	C
V	S	E	R	A	I	C	G	H
G	H	R	V	C	E	S	A	I
A	I	C	H	G	S	R	E	V
C	A	H	I	S	G	V	R	E
E	V	G	A	R	C	I	H	S
I	R	S	E	V	H	A	C	G

### INVITE A FRIEND TO JOIN THE SOCIETY

The Nittany Mineralogical Society prides itself on having among the finest line-up of speakers of any earth sciences club in the nation. Everyone is welcome at our meetings. If you'd like to be part of our Society, dues are \$20 (regular member), \$7 (student rate), \$15 (seniors), \$30 (family of two or more members, names listed). Those joining in March or later may request pro-rated dues. Your dues are used for programs and speakers, refreshments, educational activities, Bulletins, and mailing expenses. Please fill out a membership form (available at [www.nittanymineral.org](http://www.nittanymineral.org)), make checks payable to "Nittany Mineralogical Society, Inc." and send them in as directed, or bring your dues to the next meeting.

**We want to welcome you!**

### CONTACT INFORMATION

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The **Bulletin Editor** will welcome your submissions of articles, photos, drawings, cartoons, etc., on minerals, fossils, collecting, lapidary, and club activity topics of interest to the members. Please contact:

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Newsletter submissions are appreciated by the first Wednesday of the month. Photographs or graphics are encouraged, but please do not embed them in word processor files; send them as separate graphics files (good to highest quality JPEG files, about 1050 pixels wide, are preferred). Please provide captions and name of photographer or artist.

**Visit us at [www.nittanymineral.org](http://www.nittanymineral.org)**