

DVESScapades

escapades: interesting, stimulating, exciting activities and adventures



Delaware Valley Earth Science Society Newsletter



Meeting, April 13, 2011
Program: Ken MacKenzie from
Sewell, NJ on Aurora, NC fossils

Delaware Valley Earth Science Society, Inc. (DVESS)
P.O. Box 372 Maple Shade, N.J. 08052
DVESS Website : <http://www.dvess.org>

President's Message - At the end of the month on **April 30, we are hosting the**

STERLING HILL MINE TOUR AND DIGG site, AND, we're once again



hosting **A NIGHT DIG UP AT STERLING**

HILL (for more info: <http://uvworld.org>). This is our

biggest event of the year, and a chance to meet some of our northern fluorescent collectors. In addition, Alice and Rick Harty, long-time members of the DVESS who retired to Tennessee, are driving up to take part in it too. The folks at Sterling Hill are constantly working on the mine and grounds, so even if you've been before, there's always something new to see.



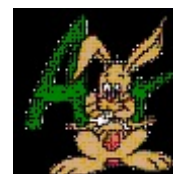
spark a collecting interest in the younger generation, and ultimately keep our club alive for many years to come. Keep your ears open for friends who are home schooling their kids suggest that the Junior Rockhound program would be a great adjunct to their science curriculum.

--Terry Wilson

(Photos above, of Stirling, courtesy of Jim Cooper, Bob and Sue Reynolds and Jeff Winkler from UV world)

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Courtesy of Diamond Dan	
Happy spring and renewal/rebirth, get out and have fun!	



- April 1-3, Elkridge, MD** - Annual Atlantic Micromounters Conference sponsored by the Micromineralogists of the National Capital Area. MHA Conference Center. Registration: S. Weinberger <cscrytals2@verizon.net>.
- April 2-3, Plymouth Meeting, PA** - Mineral Treasures and Fossil Fair - 2011 Annual Show and Sale, The Philadelphia Mineralogical Society and the Delaware Valley Paleontological Society present a Joint show and sale at the Lulu Temple, 5140 Butler Pike, Plymouth Meeting, PA., Saturday, April 2; 10am to 5pm., Sunday, April 3; 10am to 4pm. Fossils, Minerals, Gems, Speakers, and Exhibits. Learning activities include a Fossil Dig and a Kid's Mineral Corner. Also, Food, Door prizes and Scouting Merit Badge information. Adults, \$5.00; Children \$1.00. Uniformed Scouts are free Information: show Chair at 609-953-1987
- April 06 Late Nights at the Museum, Rutgers Museum Egyptology. For more info <http://geologymuseum.rutgers.edu>. Free from 4 pm to 8 pm
- April 30th Our Bigg Digg at Sterling Hill, NJ The weekend mineral show is April 30 - May 1. Several references on the web. Here's one:<http://nojms.org/ushow.htm>

Franklin Institute **2011 Night Skies in the Observatory Schedule**

Schedule subject to change. Speakers to be announced.

April 14; May 12 ; June 9 ; July 14 ; August 11 ; Sept. 8 ; Oct 13 ; Nov 10 ; Dec 8 ;

About Night Skies in the Observatory

Hosted by Chief Astronomer at The Franklin Institute, Derrick Pitts, the Joel N. Bloom Observatory is open late to the public and offers 5 different telescopes for you to view celestial objects in the sky, including stars, planets, nebulae, and if conditions are right, a galaxy or two. The evening includes a Fels Planetarium show and a lecture or presentation (appropriate for all ages) on an astronomical or space science topic. The Observatory is staffed with knowledgeable observers and free star maps are provided. Meet some BIG STARS on the second Thursday of each month at The Franklin Institute! The event is held from 6-9pm all months except June, July, and August when the event is held 7-10pm! Admission is \$5.00. Members are free. Advance reservations are not needed. Tickets are sold on-site when you arrive.

Visit the Franklin institute. Take a ride on the → 1927's Baldwin engine.



Visit our heart and take a walk thru, be a blood corpuscle in the giant beating heart. *The Giant Heart* has been a Philadelphia icon since its opening in 1954.

Then see the brain and heart that are preserved, plasticised. Catch eye and heart dissections, or a liquid air show. Make paper with me like Ben and the Colonials did before it was industrialized, (a make and take). I am a volunteer here every Friday.

There is so much to see and do here every day. You can start with - *Changing Earth*, which opened to the public, along with *Electricity*, on

March 27, 2010, focuses on the powerful forces of air, water, and land and their effect upon the earth, as well as how humans respond to and interact with these forces. *The Franklin Airshow* features The [Wright Brothers](#) Aeronautical Engineering Collection, their newly restored Model B [Flyer](#), and a [U.S. Air Force](#) 1948 [T-33 Shooting Star](#) Jet Trainer. (Aviation and Technology). *The Sports Challenge* is an interactive exhibit that shows the science behind sports. (Physics and Technology)

The Train Factory has a real, moving train: The [Baldwin 60000](#) steam locomotive. (History, Engineering and Technology)

Sir Isaac's Loft, allows visitors to blend art and science into their own masterpiece. (Physics and Art) *Space Command* features real space suits and allows visitors to track their houses, in real time, via satellite. (Astronomy, Technology and Mathematics)

The Franklin Institute once featured the *Foxtrot Papa* Boeing 707 as a permanent exhibit. This partial fuselage could easily be seen from the outside of the building and was a remarkable sight in the middle of a major city. But in the 1980s, the aircraft was sold for scrap, much to the dismay of aviation enthusiasts.

Amazing Machine allows visitors to experience a machine-like environment featuring little-seen pieces from The Franklin Institute's priceless collection, including Maillardet's Automaton, believed to have the largest cam-based memory of any automaton of the era.

Below is a snapshot of featured FREE events to enjoy with your family! For a full calendar of Philadelphia Science Festival Events, including Science Conversations and Cafe Events, [CLICK HERE](#).

Science Carnival | on the Benjamin Franklin Parkway

When: **April 16, 2011**; 10AM - 5PM

What: Logan Circle will become a science wonderland, featuring more than 80 exhibitors offering non-stop family-friendly experiments (extract DNA from a strawberry!), interactive activities (test a "crime scene" for forensic evidence!), games (egg-marine challenge!), and a packed line-up of live entertainment on the Festival Main Stage in Aviator Park.

The Carnival will take place between 18th and 20th Streets, in and around Logan Circle.

Playground Physics | at Franklin Square

When: **April 21, 2011**; 10:30AM

What: Explore the laws of physics while enjoying the carousel and other fun activities at the Franklin Square playground!



What a spectacular place !!!

Come see Wildacres and take some classes.

Look up EFMLS and go to Wildacres.

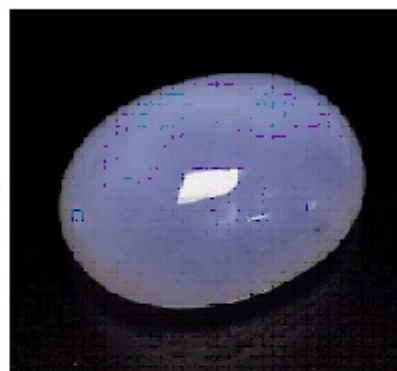
Blank space just waiting for you to fill up with your stories or trip info.

Mineral of the Month: Chalcedony

Mineral of the Ages

by Emma Fajcz

Chalcedony is a fascinating mineral with many interesting details about it, both historically and scientifically speaking. The mineral's name is derived from the old seaport of Chalcedon, which was an ancient Greek city in Turkey, where it is still mined to this day. Some of the more common varieties of this semi-precious gemstone are carnelian, chrysoprase, onyx, flint, jasper, bloodstone, and agate. The varieties of chalcedony come in many different colors, including white, blue, grey, red, green black, tan, yellow and brown. This mineral's value varies greatly in quality from specimen to specimen, but most samples are affordable. The best quality pieces are evenly colored and free from inclusions.



This beautiful mineral has much historical significance. In the ancient world, different civilizations carved varieties of chalcedony into hunting tools, cups and bowls, as well as jewelry. Archaeologists have even discovered Babylonian and Assyrian cylinder seals dating from 2500 to 500 B.C. It has even been used in mosaics in Florence, Italy. The Romans used sardonyx, a reddish brown and white variety of chalcedony, as material for their signet rings because the wax did not stick to the seal. Victorian gem engravers loved onyx, a black type of chalcedony, for cameos because it was strong and easy to carve. This mineral has been, throughout the ages, probably the most common of stones used by gem engravers. The Roman historian, Pliny, noted that when heated and rubbed, a chalcedony specimen would attract straw. Chrysoprase, the most valuable form of chalcedony, was the favorite stone of Frederick the Great of Prussia who loved its brilliant green color. It is believed that Alexander the Great wore a sample of chrysoprase on his girdle during all his battles.

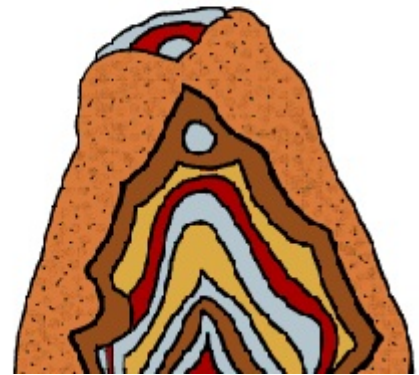
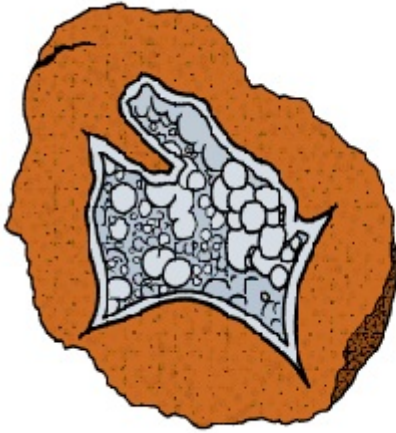
There are numerous scientific facts about this gemstone. It forms in small cavities containing quartz-rich water. Specimens of chalcedony are mined all over the world since it has so many varieties, although many of the well-known mines are located in Uruguay and Brazil, many fine samples are found in the United States as well. For example, chalcedony roses, a collection of chalcedony blades on a host rock, are found in the Southwestern desert of California. Interestingly enough, pure samples of this mineral are white, although the stones used for jewelry are bluish in color. Chrysoprase, which is only mined in Australia, acquires its color from nickel. However, the blue-colored chalcedony gets its coloring from the scattering of light on tiny particles of stone, which is the same mechanism that is responsible for the blue color in the sky. This stone is very porous, so it can be dyed easily to deepen its coloring. This, of course, must be taken into consideration when cleaning this kind of jewelry, as harsh chemicals can ruin the gem. Also, if this mineral is left in



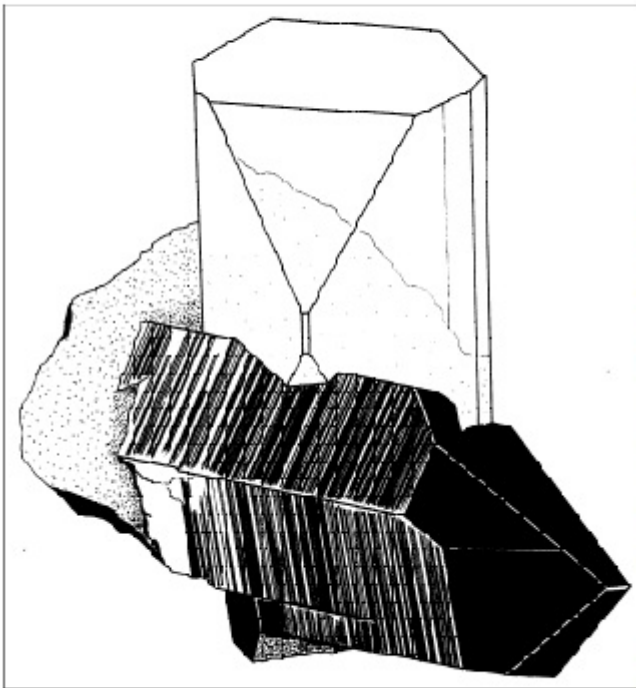
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the hot sun, it will fade.

Chalcedony is a beautiful, widely-used, semi-precious gemstone used all around the world. Ancient peoples prized this unique specimen for its beauty and durability. Today, this mineral is used primarily in jewelry and mineral collections. From California to Brazil, and from Roman times to modern day, chalcedony is truly the mineral of the ages.



A MINERAL GIFT FOR COURTNEY, STERLING, KATLIN AND KYLE



I'd love to give you this awesome topaz on smoky quartz specimen from the Skarda District, Pakistan. The topaz is practically orange. You will also notice from the picture that it is so clear you can see right through it to the matrix on the back side of the specimen. There are no flaws (like cracks or inclusions) inside the crystal. A gemologist could cut it into a very large, very beautiful gemstone. HOWEVER, we mineral collectors prefer to keep a specimen in its natural condition.

Topaz is found all over the world in the igneous rock called *granite*. There are special igneous deposits called *pegmatites* that have

the same minerals as granite as well as many rare and wonderful minerals like topaz, tourmaline, beryl, Brazilianite, and others. This specimen came from a pegmatite deposit.

Quartz

Chalcedony var. Agate

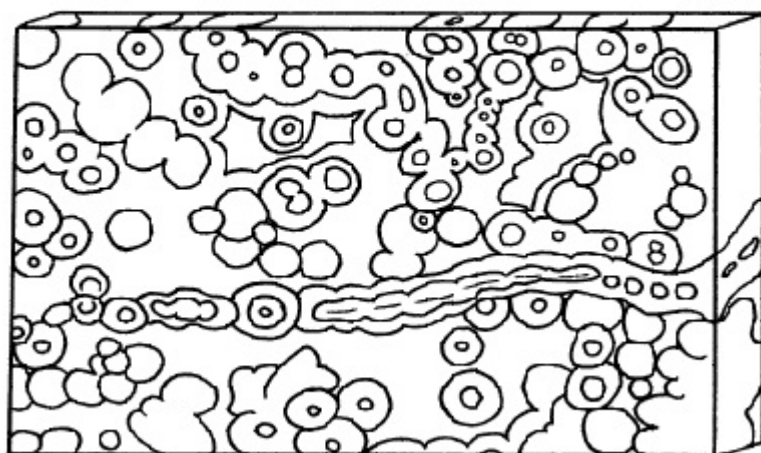
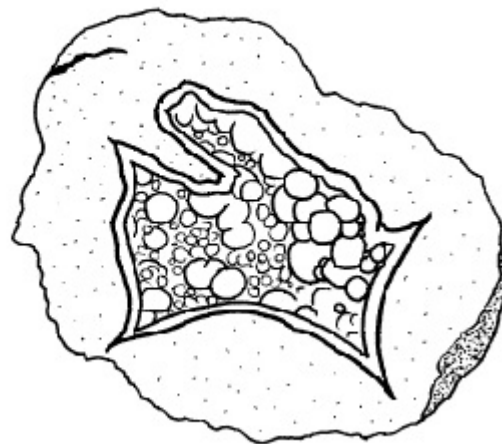
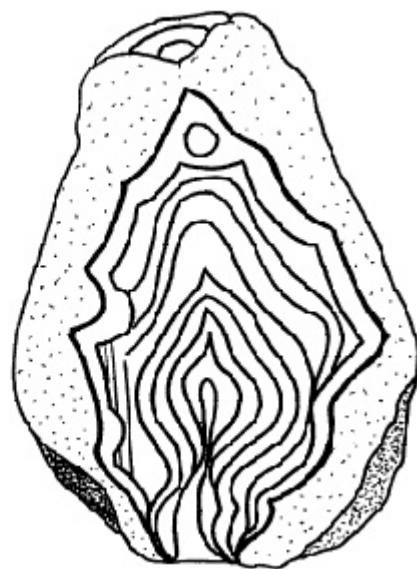
SiO_2 ~ Silicon Dioxide

Chalcedony is a variety of quartz. They have the same chemical formula (SiO_2 , silicon dioxide). Chalcedony does not form large, visible crystals like the quartz described on the last page. It forms crystals that can only be seen by a powerful microscope. Mineralogists describe this as *cryptocrystalline*.

There are different types of chalcedony, each of which has its own special name. Red or yellow chalcedony is called *jasper*. Apple-green chalcedony is *chrysoprase*. Banded chalcedony is called *agate*. Banded agates can have different shades of gray. Others can have bands with many different colors including white, gray, blue, yellow, red, flesh-pink, orange, to name a few.

There are some nice occurrences of chalcedony in California. To the right (top) is a chalcedony nodule - a banded agate - from the world-famous Hauser Geode Beds near Blythe, Riverside County. The bands are different colors, including gray-blue, yellow, tan and red. To the right (bottom) is a chalcedony geode from the same locality. The chalcedony is grayish-blue. The surrounding material is rust red.

Below is a slab of jasper. The spheres in the top half of this specimen are mustard-yellow. The spheres in the bottom half are bright red. This colorful specimen is known as Morgan Hill Poppy Jasper and is found at Morgan Hill, south of San Francisco.





Spectacular!!!

photo by Steve Weinberger

Several spectacular Rhodochrosite specimens from China were on display at Collectors Edge during the

Tucson show this year. This one was nicknamed "The Empress of China".

More places to visit: Don't forget our famous

Apr 30 to May 1: 39th Annual NJESA Show sponsored by the Franklin-Ogdensburg

Mineralogical Society in conjunction with the NJ Earth Sciences Assoc. and Sterling Hill Mining Museum. Franklin School, Franklin, NJ (**see our front page for more.)**

June 11: 9th Annual Rock Swap and Sale, Sat. Rain or Shine Sponsored by the Connecticut Antique Machinery Association, Inc. and the Danbury Mineralogical Society to benefit the Connecticut Museum of Mining and Mineral Science. includes Rocks, minerals, fossils, jewelry for sale and trade. Tour the new wing of the mining museum. The museum will be selling specimens from the John Schroder collection. For information and directions check our website at www.ctamachinery.com or call (860) 927-0050 (museum) or John Pawloski (860) 354-0296

July: 30-31: 32nd Annual Champlain Valley Gem, Mineral & Fossil Show sponsored by the Burlington Gem & Mineral Club. Tuttle Middle School, So. Burlington, VT

Aug: 27-28: 45th Annual Rock & Mineral Show sponsored by the St. Lawrence County Rock & Mineral Club. Madrid Community Park, Madrid, NY
27-28: 48th Annual Gem & Mineral Festival sponsored by the Capital Mineral Club. Everett Arena, Concord, NH

Sept: 24-25: 47th Annual Atlantic Coast Gem, Mineral & Jewelry Show hosted by the Gem Cutters Guild of Baltimore, Howard County Fairgrounds, I -70 at MD Rt 32; West Friendship, MD
30 to Oct 2: Desautels Micromount Symposium hosted by the Baltimore Mineral Society. MHA Conference Center, Elkridge MD.

- Oct:** 15-16: 38th Annual Gem, Mineral, Fossil & Jewelry Show & Sale sponsored by the Kanawha Rock & Gem Club. So. Charleston Community Center, So. Charleston, WV.
22 – 23: 42nd Annual Rochester Gem, Mineral, Jewelry & Fossil Show sponsored by the Rochester Academy of Science Mineral Section and Rochester Lapidary Society. Monroe Co. Fair & Expo Center, Henrietta, NY.
- Nov:** 5-6: 7th Annual Rock & Gem Show sponsored by the Penobscot Mineral & Lapidary Club. Brewer Auditorium, Brewer, ME.
19-20: 45th Annual Gem, Mineral, Jewelry, Bead & Fossil Show sponsored by the Gem & Mineral Society of the Palm Beaches. So. Florida Fairgrounds Expo Center East; West Palm Beach, FL.

Blank space just waiting for you to fill up with your stories or trip info.

DVESS MEETING LOCATION :

DIRECTIONS:

From Atco (west-bound), after the traffic light at Taunton Ave. (Rite Aid drugstore on the left), the church is about the 3rd building on the right; turn into the first driveway. If you miss it, pass by the church and turn Right onto Broad St. (at the Berlin Diner) then turn Right into the parking lot of the Baptist Church and go straight all the way - the parking lots of

both churches connect.

From Rt. 73 in Marlton: head East (South) on Rt. 73. As you enter Berlin, you will pass Wal-Mart (on the left) and a shopping center (on the right) with Shop Rite and Staples. **Get into the Right "Exit Only" lane and follow the signs for Cross Keys Rd. At the intersection of Cross Keys Rd. and the White Horse Pike (Rt. 30) turn LEFT. At the next intersection (Broad St.) continue straight past the Berlin Diner and SPEEDY MART on your left; pass by 2 or 3 white storefronts on the left then see the big white church with red front doors on your left. Pass in front of the church and turn into the driveway on the far side. Education Building is behind the church.**

From Lindenwold or Clementon on the White Horse Pike (east-bound):

As you enter Berlin business district, you will pass through the traffic light at Cross Keys Rd. (CVS Pharmacy on right corner). Follow highlighted directions above.

MEMBERSHIP INFORMATION

Regular members are entitled to participate in all DVESS activities. Sponsoring members are entitled to the same plus a specially chosen mineral specimen. Dues are renewable each year in January. Membership rates for the Society:

Regular Membership:

\$15.00 for the 1st family member + \$5.00 for each additional family member

\$10.00 for the 1st Senior (65+) member + \$5.00 for each additional family member

Sponsoring Memberships (each additional family member - \$5.00):

"Silver" \$50.00 for 1st family member - receive a Geode Specimen

"Gold" \$75.00 for 1st family member - receive a Native Gold Specimen

"Platinum" \$100 for 1st family member - receive a Premium Specimen

SOCIETY INFORMATION

The **Delaware Valley Earth Science Society, Inc.**, (DVESS), a non-profit organization, was founded in 1956 and incorporated in the state of New Jersey in 1957.

The Society:

- * promotes interest , knowledge and the development of skills in the "earth sciences". These interests include mineralogy, paleontology, lapidary arts, archeology and local preservation.
- * supports the conservation of natural resources, advocates the availability of collecting sites and maintains close contact with those in the academic field.
- * is a member club of the Eastern Federation of Mineralogical and Lapidary Societies
(<http://www.AmFed.org/EFMLS>)

MEETINGS

The Society meets the 2nd Wednesday of each month throughout the year at Centenary United Methodist Church, 151 South White Horse Pike, (route 30) in Berlin. Junior Rockhounds meet at 7:30pm with the regular meeting beginning around 8 pm.

Anyone with info for the newsletter please share with me. You can be published!

Stuff you did in school, on a trip etc., see my info below (next page).

Editor's Notes: Editor is not responsible for authenticity of information in any articles submitted for publication. Nor are the opinions expressed in the "DVESScapades" necessarily those of the officers of the Delaware Valley Earth Science Society, Inc., and/or the editor.

AFMS CODE OF ETHICS (American Federation of Mineralogical Societies)

- I will respect both private and public property and will do no collecting on privately owned land without the owner's permission.
- I will keep informed on all laws, regulations of rules governing collecting on public lands and will observe them.
- I will to the best of my ability, ascertain the boundary lines of property on which I plan to collect.
- I will use no firearms or blasting material in collecting areas.
- I will cause no willful damage to property of any kind - fences, signs, buildings.
- I will leave all gates as found.
- I will build fires in designated or safe places only and will be certain they are completely extinguished before leaving the area.
- I will discard no burning material - matches, cigarettes, etc.
- I will fill all excavation holes which may be dangerous to livestock.
- I will not contaminate wells, creeks or other water supply.
- I will cause no willful damage to collecting material and will take home only what I can reasonably use.
- I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.
- I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.
- I will cooperate with field trip leaders and those in designated authority in all collecting areas.
- I will report to my club or Federation officers, Bureau of Land management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.
- I will appreciate and protect our heritage of natural resources.
- I will observe the "Golden Rule", will use "Good Outdoor Manners" and will at all times conduct myself in a manner which will add to the stature and Public "image" of rockhounds everywhere.

<i>DVESS Directory 2008</i>	President terry@terryfic.com	Terry Wilson or terry@dvess.org
1st Vice President Ann Lynne Benson 856-783-0969 SeleniteQueen@gmail.com	2nd Vice President	
Jr. Rockhound Coordinator Mel LeCompte 856-783-0969 works-in-faith@comcast.net	Recording Secretary 856-728-1731	Grant Elliott gle@verizon.net
Website Coordinator 609-714-1309 Terry Wilson terry@dvess.org	Special Events Coordinator Ann Lynne Benson 856-783-0969 SeleniteQueen@gmail.com	
Treasurer and Program Chair Gary Weinstein 856-234-0708 - home 856-795-5077 - wk garyskyrock@hotmail.com	DVESS Newsletter Editor & Membership Chair Carol De Cuzzi 856-428-0621 - home decuzzic@comcast.net or DVESS@int-pro.com	

Membership Form

Start w/ first family member **(designated as head of family)** Juniors must have an adult head of family with the Junior as the additional family member for insurance purposes.

First Name: _____ Last Name: _____
Address: _____ City: _____
State: _____ ZIP+4 _____
Phone: _____ Email: _____
Cell Phone: _____ Profession, School or Major Work _____

Okay to let other members of the Club see your email and other orange-starred information (on website)?

Okay to share _____
Do NOT share _____

Newsletter Delivery **ONLY** via e-mail

additional family members to be registered w/ above member

Type of membership **Regular Membership:**
\$15.00 for the 1st family member + \$5.00 for each additional family member
\$10.00 for the 1st Senior (65+) member + \$5.00 for each additional family member
Dues are collected on a calendar year Jan to Dec, **** no pro-rata rates ****
List additional members on another page if needed

First Name: _____
Last Name (only if different from above) _____
First Name: _____
Last Name (only if different from above) _____
First Name: _____
Last Name (only if different from above) _____

Sponsoring Memberships (each additional family member - \$5.00):

"Silver" \$50.00 for 1st family member - receive a Geode Specimen

"Gold" \$75.00 for 1st family member - receive a Native Gold Specimen

"Platinum" \$100 for 1st family member - receive a Premium Specimen

Interests: Minerals ____ Fossils ____ Lapidary ____ Collecting ____ Museum Trips ____
Trotter ____ Sterling Hill ____ other, please list _____

How did you learn of DVESS? _____

Other clubs you belong to _____

Comments _____

What NON-DVESS interests or hobbies do you have? Would you be willing to share with our members? _____

What would you like the club to do or provide for you? _____
How would you like to help us? _____

Delaware Valley Earth Science Society, Inc. (DVESS)
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Maple Shade, N.J. 08052
DVESS Website : <http://www.dvess.org>

RETURN SERVICE REQUESTED

