DVESScapades

escapades: interesting, stimulating, exciting activities and adventures

ley **E**arth **S**cience **S**ociety **N**ewsletter

March 10, 2010

Program: A second attempt as our meeting welcomes new member and first time presenter Lance Schnatterly, who will regale us with his daring tales of collecting in the Hell Creek Montanna dinosaur formation. He will bring in his finds and show pics as well as describing the age and formation.

Dessert, coffee and tea await you

On The Inside

President's Message- Well, two major snowstorms successfully derailed our February meeting. Global warming has wreaked it's revenge. Hopefully, an oxymoron is not in play here. The scheduled programs just move forward one month as follows: Lance Schnatterly will discuss the Hell Creek Formation in March and Judith Goldberg will regale us with the Fossils from Cherry Hill in April.

I want to remind all stragglers who have not remitted their annual dues to pay up. These dues, which have not increased in many years, are now due. (See the Society information on page for the dues structure on page for a membership form. ED)

The STERLING SUPER DIGG, which will take place on Saturday April 24th, Mark your calendars. This is a can't miss field event exclusively sponsored by our organization.

Again, with Lance's presentation in March, If anyone has fossils from this formation, please bring them in on March 10th for show and tell. I'll bring a couple of goodies from Hell Creek and the Lance Formation (Adjacent to and same period as Hell Creek). Lets see if you can match what I bring. The Gauntlet has been thrown. See you there.

Also, mark your calendars for the always **spectacular STERLING SUPER DIGG** which will take place on **Saturday April 24th** is that much closer now. This field event, exclusively sponsored by our organization, is the one time of the year we can collect those rarities deep in the heart of the "Fluorescent Capital of the World". You **MUST** be a club member for insurance purposes. You can join on the spot **with photo ID.** Now is the time to make your plans and spread the word. More information as to particulars will be forthcoming page .

Since DVESS now has a spiffy projector, we have started to build up our DVD/Video library for some future fascinating programs, which previously was impossible without audio/visual technology. (These DVD are available for loan to our members as part of our building library.)

I look forward to seeing you all this month. Grant

FIELD TRIPS - IN ACCORDANCE WITH FEDERATION INSURANCE REGULATIONS, THE FOLLOWING FIELD TRIPS ARE ANNOUNCED:

Each and every one of you is important in helping keep the lines of communication, education, and involvement alive, not only our club, but in the Federation as well. One place this teamwork can be seen is in the preparation for the **Sterling DIGG**, coming up in, April 2010. Many people have taken on tasks which together will make it possible for you to enjoy a collecting experience rockhounds in other parts of the globe can only dream of - night collecting in the Fluorescent Mineral Capital of the World. See www.uvworld.org for more information.

We will have a full repeat of all the exciting special events we did last year, and once again those who attend will have their chance to "pick a piece of history" by selecting their choice of a piece of ore that still sits on the mill's conveyor belt from the day the Sterling Hill Mine was shut down - Good Friday, March 28th 1986. Every year, the choice gets smaller since nothing gets added to the belt!

The "upper mill" area is still not open to normal tours or even any access to the public, so our guests at the Sterling Hill Digg have a very unique privilege extended to them on this one day of the year.
In addition to the special tour of the highest part of the mill structure and a walk across (inside) the conveyor you see way up in the air in all the photos of the site, we're also planning to have an extended "blackout tour" of the lower part - the mine itself. Maybe we will even be able to go back into two or three tunnels, in the dark with only your black lights on - time permitting. And again this year, a very special feature has been added -- an animated blast display. Wait until you see this! and hear it!! the kids will love it.
Keep in mind also that, weather permitting, the Ellis Observatory will be open after dark - the 20-inch telescope is amazing!!

As in past years, we will have many useful door prizes donated by our supporters (see their links on the main webpage, and check out their websites) including special prizes just for our young diggers. We are waiting to hear from several of our sponsors, so more details will be coming later.

Being stuck indoors while it's raining or snowing is a great time to write an article for your newsletter. Your fellow club members, as well as your editor, will greatly appreciate your efforts. It doesn't have to be anything elaborate: your take on a field trip, a get-acquainted blurb about a new (or old) member, some thoughts on a mineral or fossil that you found while on vacation, or on research you've done on the internet.

Now is the time to think about the Spring sessions at Wildacres. More information can be found on the EFMLS website <www.amfed.org/efmls/wildacres.htm>.

Mark your calendar for **Philadelphia Mineral Treasures And Fossil Fair**'s 30th Annual Show and Sale sponsored by the Delaware Valley Paleontological Society and the Philadelphia Mineralogical Society. Check the DVPS website for more info.
Again this year – they will have several speakers talk about paleontology, geology and minerals.

Dr. Ted Daeschler, Curator of Vertebrate Paleontology at The Academy of Natural Sciences will speak on The Nunavut Paleontology Expeditions: Late Devonian Fossils from the Canadian Arctic. For more information on Dr. Daeschler's research, you can go on the web to http://clade.ansp.org/vert_zoology/people/daeschler/.

Dr. Lauck Ward, Curator Emeritus of the Virginia Museum of Natural History will speak about

the Plain. The Show will be held at the Shriners LuLu Temple 5140 Butler Pike, Plymouth Meeting, PA 19462 For more information on the Show, please go to the DVPS website at http://dvps.essentrix.net

MEMBERSHIP (repeat info, for the last month) Thank you to all of those who already renewed your membership for 2010 – this is a good start to the new year. Remember we run on a calender year with no pro-rata. I would like to get filled out renewal forms for all renewals this year to put in a Membership Binder so I have current records for everyone. I have attached a renewal form with this issue of the DVESS Newsletter for that purpose, and I would appreciate all of you renewing, including those of you who have already renewed, but make sure I get a filled out Renewal form with current information. It can be copied and emailed to me at either of the e-mail addresses in the info box Thank you. CDC. Editor, DVESScapades

UPCOMING EVENTS

New Jersey State Museum Sunday Science Lecture Series

Sunday Science Lecture Series The New Jersey State Museum is excited to offer the third season of the Sunday Science Lecture Series, sponsored by the Friends of the New Jersey State Museum. Scholarly, yet family-friendly lectures will be presented in the Museum's Auditorium by some of the world's most distinguished and prominent researchers in the natural sciences, including wildlife and ecology, paleontology, paleo artistry, archaeology, paleoanthropology, space science, and global climate change. The Lecture Series is free and open to the public.

The experience isn't over when the presenter is finished: following each lecture, guests will have the opportunity to ask questions, share their own experiences and ideas, and meet the featured lecturer. Bring your own specimens for the Museum's professional paleontologists and archaeologists to identify! Each lecture begins at 4 pm. Parking is free. For more information, please call (609) 292-6740 weekdays from 8:30 to 3:30. Reservations are suggested.

Paleo-Illustrations - **March 14, 2010** 4pm; (60 min); General Audience; Auditorium; Free

New Jersey native Larry Felder is one of the world's leading paleo artists, with much of his work featured in museums and books. He will be discussing the subjects of his art, as well as sharing many of his newest pieces.

Space is limited. Reserve your seats early!

WHAT YOU NEED TO KNOW Free Admission - Free Parking, Museum Auditorium

Each lecture begins at 4pm. Light refreshments will be served. For more information, or to make reservations, please call (609) 292-8594

UPCOMING SHOWS

Mar: 6 – 7: Stanton, DE – The Delaware Mineralogical Society's 47th Annual Earth Science Gem and Mineral Show and the **61st Annual EFMLS Convention** hosted by the Delaware Mineralogical Society. Celebrating the Club's 50th Anniversary and hosting the 2010 EFMLS Annual Convention. EFMLS Annual Meeting Friday, March 5. Saturday, March 6, 2010 - 10 A.M. to 6 P.M., Sunday, March 7, 2010 - 11 A.M. to 5 P.M. at the Delaware Technical and Community College @ I-95 Exit 4B, Churchmans Road (Rt 58) Newark (Stanton), DE 19713. Adults $6.00, Seniors $5.00, Juniors $4.00, and children under 12 free with Adult. Interesting and educational exhibits of mineral, lapidary and fossil specimens, Displays from regional and university museums, Expanded list of outstanding dealers of minerals, fossils, gems, jewelry and lapidary supplies, Hourly door prizes and large specimen raffle, Lapidary demonstrations, Children's booth where youngsters may purchase inexpensive minerals, fossils and grab bags. Club booth with member-crafted lapidary work and mineral/fossil

specimens from member's collections for sale, Campus cafeteria open most of the day for food and snacks. For further information and Discount coupons (see page following) or visit www.delminsociety.net

Mar 12-14: 21st Annual Clifton/North Jersey Gem & Mineral Show Sponsored by the North Jersey Mineralogical Society. Location: The "Benway School", 970 Black Oak Ridge Road, Wayne, New Jersey. Time: 10:00 am to 5:00 pm. Contact: Robert Horn 570-369-5875 E-Mail: RAHorn@PTD.NET

Mar 19-20: 40th Annual Unifour Gem, Mineral, Fossil & Jewelry Show sponsored by the Catawba Valley Gem & Mineral Club. Metro Convention Center, Hickory, NC.

Mar 20-21: Gem, Lapidary and Mineral Society of Montgomery County MD annual gem mineral fossil show, 16 Chestnut St. Gaithersburg, MD, WWW.GLMSMC.com Coupon available on page

Mar 26-28: 37th Annual Atlantic Micromounters Conference hosted by the Micromineralogists of the National Capital Area. MHA Conference Center, Elkridge, MD. Registration & Info: S. Weinberger, <cscrystals2@verizon.net>.

Mar 27-28: 38th Annual Gem & Mineral Show sponsored by the Island Rockhounds. Holy Family School, 25 Fordam Av; Hicksville, NY.

Mar 27-28: 41st Annual Che-Hanna Rock & Mineral Club Show sponsored by the Che-Hanna Rock & Mineral Club. Athens Twp. Volunteer Fire Hall, Sayre, PA

April 10-11: 41st Annual New York Southern Tier Geology Club Show sponsored by the Southern Tier Geology Club. Johnson City Senior Citizen Center, Johnson City, NY

April 17–18: Monongahela Rockhounds Gem Mineral and Fossil Show. April 17, 2010 10:00 am to 6:00 pm, April 18, 2010 10:00 am to 4:00 pm. Location: West Mifflin Volunteer Fire Company #4 Skyview Hall, 640 Noble Drive, West Mifflin PA 15122. Web Site: www.monongahelarockhounds.org.

April 24-25: 38th Annual NJ Earth Science Gem & Mineral Show (with Out-door Swap) Cosponsored by the Franklin-Ogdensburg Mineralogical Society, New Jersey Earth Science Association and Sterling Hill Mining Museum. Franklin School, Franklin

NOTE Come visit DVPS (Delaware Valley Paelontological Society) the 4th Thursday of the month at the Academy of Natural Sciences in Philadelphia, PA

Friends & Family Overnights are open to the public. These overnights are available on March 19, April 16 and May 22, and include our new **Survivor** program. Overnighters will investigate: How dinosaurs eat their lunches without becoming lunch themselves; Why animals have camouflage, spines, warning colors and more; How to become an excellent tracker as you travel through the museum on a scavenger hunt; Solve a puzzling challenge as a team!

Scouts and their families can have fun while completing requirements at our special Scout Overnights. See Boy Scout Overnights and Girl Scout Overnights for more information.

All Overnights

Time: 6:30 pm to 9:00 am; Check-in is 6:30-7 pm.

Ages: Safari Overnights are appropriate for children ages 7-14. One adult is required per 3 children. No outside food or drink is permitted and extra large sleeping mattresses are discouraged.

Reservations: **Call** .

Fees: **Children:** $35/child for members; $40/child for non-members

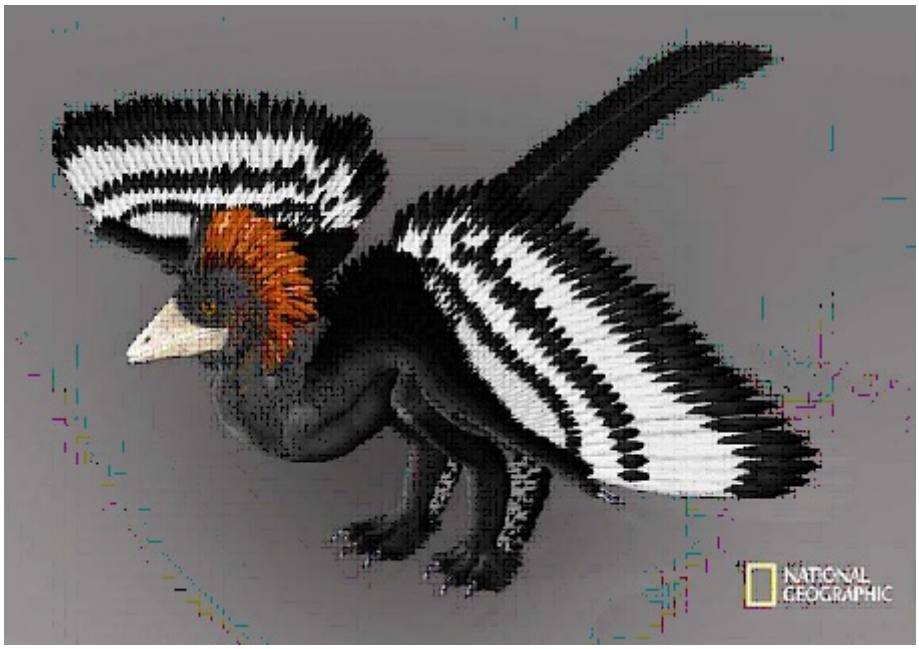
Adults: $30/adult for members; $35/adult for non-members

A deposit of $10 per person is due upon registration. The balance is due one month prior to the Safari Overnight date.

Contact: http://www.ansp.org/activities/safari_overnight.php And read the info at http://www.ansp.org/activities/pdf/Safari_Overnight_Parents_Chaperones.pdf

DIG THIS! **True-Color Dinosaur Revealed: First Full-Body Rendering** Submitted by Virginia Sedock *news.nationalgeographic.com* February 4, 2010 from the Feb DVPS Newsletter

For the first time, scientists have decoded the full-body color patterns of a **dinosaur**, a new study in the journal ***Science*** says. That may sound familiar, given last week's announcement of the first scientifically verified dinosaur color scheme. But the previous research, published in *Nature,* had found pigments only on a few isolated parts of dinosaurs and had used less rigorous methods for assigning colors to the fossilized, filament-like "protofeathers" found on some dinosaur specimens, say authors of the new report. Both studies raise hopes that improved knowledge of dinosaur coloration could lead to insights into how some prehistoric animals behaved and why feathers evolved in the first place. The subject of the new study—the 155-million year- old *Anchiornis huxleyi*—turns out to have looked something like a woodpecker the size of a chicken, with black-and-white spangled wings and a rusty red crown. The color patterns on *Anchiornis*'s limbs are "quite similar to the silver-spangled Hamburg chicken, a domestic breed of ornamental chicken," said ornithologist Richard Prum of Yale University. Prum is a co-author of the new study and has received funding from the Committee for Research and Exploration of the National Geographic Society (which owns National Geographic News).



Only a short time ago *Anchiornis* was completely unknown to science. The chicken-size dinosaur species' color patterns were decoded after the researchers had used a scanning electron microscope to study pigment samples taken from fossil feathers all over a specimen and then compared the samples to pigment from modern birds.

"Striking" Feather Finding

The new revelation is the second stage of what amounts to a photo finish in the race to be the first to report on scientifically established color in a fossil nonbird dinosaur. The team behind the *Science* study was led by paleontologist Li Quanguo of the Beijing Museum of Natural History and Jakob Vinther, a graduate student in molecular paleobiology at Yale University. They report that a complicated pattern of reddish brown, black, gray, and white feathers covered the fossilized dinosaur, leading to speculation that perhaps this coloration was used for attracting mates or some form of visual communication, as is often the case in living birds. The new find's implications for the evolution of feathering and flight are "striking," said study co-author Julia Clarke, a vertebrate paleontologist at the University of Texas in Austin.

Anchiornis shows that, "when elongate feathers first appear [in the fossil record], they are already distinctively spotted and striped," Clarke said. "We now have patterns within individual feathers in dinosaurs long before we get some kind of aerial locomotion."

Diving Deep Into Dinosaur Pigment

The team behind the new study, in *Science,* determined the feather colors by analyzing the shape and density of melanosomes within fossil feathers. Melanosomes are nanoscale, pigment-

bearing organelles within feathers. The microscopic particles were first found preserved in a fossil—in this case, a prehistoric bird—by Vinther and his team in 2008. The particles had previously been interpreted in fossils as bacteria. In modern birds, different types of melanosomes are known to produce different colors in feathers. Eumelanosomes are rodlike and are associated with the colors black and gray. Phaeomelanosomes are round and produce colors ranging from reddish brown to yellow. A lack of melanosomes makes white.

Coloring the Whole Plumage

Last week's report, in *Nature,* was led by paleontologists Fucheng Zhang of China's Institute for Vertebrate Paleontology and Mike Benton of the University of Bristol in England. The *Nature* team studied many different fossils but artistically recreated only one. They used fossil-feather melanosomes to infer reddish-brown and white stripes on the tail of a small carnivorous dinosaur called *Sinosauropteryx.* Derek Briggs, a co-author of the new study, said, "The other team's report is based on isolated samples from several different taxa, so they can't paint an entire animal." Even so, the earlier study did include a picture of an entire *Sinosauropteryx,* but any coloration beyond the tail and the crest running along its head and back was artistic guesswork. By contrast, Briggs said, "We have 29 samples from the same specimen, covering the whole plumage." Also unlike the team behind the *Nature* study, the *Anchiornis* team directly related melanosome shape and size—not just type—to color, said Matthew Shawkey of the University of Akron, Ohio, a biologist on the project. "This eliminated some shaky assumptions about how melanosome type relates to color," Shawkey added.

By Ian O'Neill | Mon Feb 15, 2010 04:52 PM ET from an e-mail forwarded by our Pres.

A sample of the Murchison meteorite, plus a test tube containing powdered meteorite material (DoE)

A meteorite that hit the town of Murchison, Australia, hasn't quit giving up its secrets.

The Murchison meteorite is one of the most studiedspace rocks because many pieces were recovered after it was seen breaking up as it fell through the atmosphere in 1969. Approximately 100 kg of the carbonaceous chondrite was recovered.

Carbonaceous chondrites are extremely important to scientists as they were formed from material that existed in the solar system's planet-forming disk of gas and dust. They are, quite literally, time capsules holding onto a 4-billion-year-old record of the birth of our solar system.

In this case, the Murchison meteorite has given us another clue to the abundance of organic chemicals that existed before the Earth formed. In fact, this particular meteorite may have originated from material older than our sun.

"We are really excited. When I first studied it and saw the complexity I was so amazed," said Dr Phillipe Schmitt-Kopplin, of the Institute for Ecological Chemistry in Neuherberg, Germany.

"Meteorites are like some kind of fossil. When you try to understand them you are looking back in time."

This new research used high-resolution spectroscopic tools to identify the various compounds inside. Although this meteorite has provided scientists with vast amounts of information about specific carbon-based organics before, this was the first non-targeted study. In other words, the researchers weren't tracking down just one type of chemical; they did a broad analysis for all of the chemicals it might contain.

And what they found came as a shock. It appears that the primordial solar system probably had a higher chemical diversity than present-day Earth.

In this study, 14,000 specific compounds, including 70 amino acids, were identified. But this number appears to be the tip of the iceberg; the meteorite probably contains millions of different organic compounds. More detailed analysis will now be carried out.

But why is this important? Understanding the diversity of organic chemicals that were floating around a primordial solar system will help us understand how life may have appeared on Earth. This particular chunk of carbonaceous chondrite drifted through the gas and dust of the early solar system, collecting all the basic organic chemistry from around that time. Does that mean diverse organic chemistry is the "norm" for proto-planetary star systems?

These organic compounds are known to exist on comets, asteroids and other planetary bodies, so what makes Earth the hothouse of life when everywhere else seems to be lifeless?

If organic chemistry is ubiquitous, perhaps planning to "seed" young star systems with Earth-based life isn't such a good idea. The conditions for life may not be that rare after all.

Source: BBC

FOSSIL FAIR 2010_____ Fossil Fair Chairpersons - Frank & Cathy Young

Special 2010 Fossil Fair News Announcement – We have recently learned that the Philadelphia Mineralogical Society has arranged for 15 mineral specimens from **The Academy of Natural Sciences' William S. Vaux collection** to be on display both days of the show. "These specimens are from classic Southeastern Pennsylvania locations (Chester & Delaware Counties) and many date from the early 1800's. All are superb examples and some have not been viewed by the public for more than 150 years".

The DVPS annual fund-raising event is now less than 2 months away and preparations are underway. The sales table committee has begun Wednesday fossil prep nights.

We have a secret agent in Tucson, Gene Hartstein, trying to find us some new items for sale. New member Cathy Emanuel has volunteered to be our Kitchen Coordinator. Thank you to both of them! Hopefully you have already reserved the dates of **Friday, March 26** (set-up), **Saturday, March 27** and **Sunday, March 28** (show dates) for the **"2010 FOSSIL FAIR and PHILADELPHIA MINERAL TREASURES".** This year's show and sale will be held once again at the Lulu Shriner's Temple Hall, 5140 Butler Pike in Plymouth Meeting, PA, as a joint undertaking with the Philadelphia Mineralogical Society. Much is still needed to be done and your help will be needed. Fossil Fair is our annual opportunity to gather together as a society to promote DVPS and paleontology in general. It's the perfect chance to get to know your fellow members better, see and handle lots of great fossils and raise funds to support the activities of the Society.

DVPS FIELD TRIPS_____

(If you wish to join the Delaware Valley Paelontology Society, a Sister Org, please ask for contact. Ed)

Field Trip Coordinator - *Larry Decina,* Field Trip Coordinator - *Fred Schweizerhof*

Saint Claire, PA – March 20 Collecting at a premier Fern Fossil site. Fossils include various plant fossils from the Pennsylvania age. This site is great for beginning collectors and children, as well as seasoned fossil enthusiasts. If interested, please email me at fschweizerhof@yahoo.com to receive more information. Fred Schweizerhof

Red Hill, PA - April 10th This will be a joint trip with Friends of Aurora Museum and the Calvert Marine Museum. This location is Devonian Period, yielding fish teeth, bones, scales, amphibian and plant material. We will meet at the site 10 am. If interested email Larry Decina ledecina@transanalytics.com

South Jersey Skies: Amateur astronomer catches exploding star By Keith Johnson 02/07/10, 3AM

Unlike most sciences, astronomy boasts a large number of talented amateurs who have become invaluable assistants to the professionals. The latest contributor is a retired OB-GYN doctor in Florida, who just discovered the latest outburst of an exploding star. Last year, professional astronomer Bradley Schaefer predicted that the star U Scorpii would suffer its next explosion in late 2009 or early 2010, and asked the amateur astronomy community for help in keeping watch on the star.

Dr. Barbara Harris, the owner of a 16-inch Meade telescope housed in her private observatory in New Smyrna Beach, Fla., almost didn't make the early-morning observation on Jan. 28, as she had been up late the night before. But her dog informed her that he needed a visit outdoors, and afterward Harris decided to open up the observatory and make the usual pre-dawn observations she had been doing for some months.

She was surprised to see an amazingly bright, overexposed image of a star centered in the photo. Not quite sure she was even pointed in the right direction — the morning before, U Sco had been its usual faint self — she took a much shorter exposure, and sure enough, it was U Sco. She immediately made phone calls and sent out Internet notifications, and the professional telescopes swung into operation. You may have seen notices about this activity in the news this past week.

Why was this so significant? U Sco is a recurrent nova. One of only 10 known, this is a star that explodes repeatedly, almost on a schedule.

U Sco is a close binary system, two stars zipping around each other in less than a day. The stars are very different. One is an evolving giant star, considerably larger than the Sun. The other is a dense, compact midget called a white dwarf, smaller than the Earth but heavier than the Sun. This star has essentially "burned" (by way of nuclear fusion, not fire) all its hydrogen to oxygen and carbon, and has nofusion going on in its core.

Because the two stars are very close together, gas is continually being pulled off the giant, forming a flat disc in which the two stars orbit. The white dwarf, with its enormous surface gravity, sucks gas from the disc down onto its hot surface. When enough gas collects there, about every 10 years for U Sco, nuclear fusion (which normally only takes place deep in the center of a star) starts happening on the top surface, causing a runaway thermonuclear explosion.

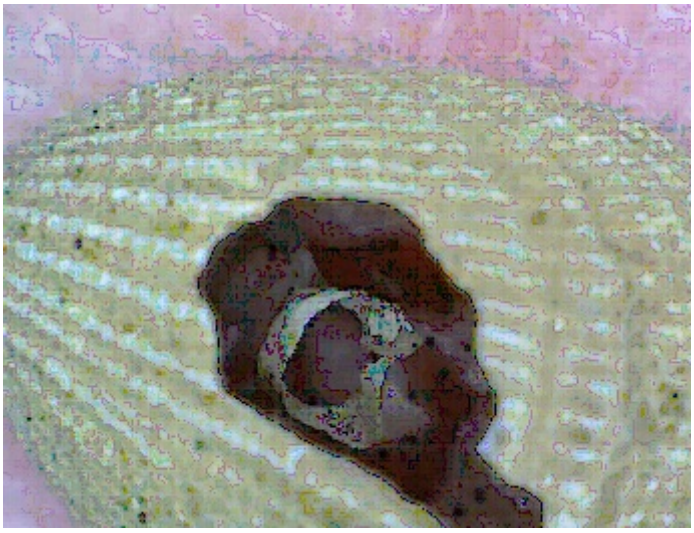
In a time span of only a day, the star becomes 10,000 times brighter than it was. It goes from being difficult to detect in a 16-inch telescope to being almost bright enough to see with the naked eye. No other nova brightens so quickly, nor fades down more quickly.

This is why Brad Schaefer asked amateurs around the world to monitor U Sco in 2009. The exact time of the outburst was predictable to only within a year. The big research telescopes aren't numerous enough to keep tabs on this one star, and they are devoted to many other observing projects.

Find out more about the Edelman Planetarium, where director Keith Johnson almost resides, at www.rowan.edu/planetarium/. In particular, you can see changes in the schedule of our family shows on Sunday afternoons

FAMILY AND FOSSILS_____ *Paul Torna*

One Saturday this past August, I visited the Reedy Point Spoil Pile along the C & D Canal with my father (78yr) and son Michael (6yr). It was my fourth trip to this late Cretaceous site. Upon arriving at the spoil piles, I set up a beach umbrella for my father to provide shelter from the intense summer heat. He read a book, kept an eye on Michael and did a little sifting for me. Michael mostly explored. After climbing sand mounds and capturing toads for two hours Michael decided he was ready to help me locate some fossils. He joined me for a belly crawl up a gigantic sand mound. He immediately found a shark tooth and a tiny brachiopod with both valves intact. I quickly put these specimens in a pill bottle and moved on. After another two hours we had our fix and fled the desert like heat.



That night I sorted through the day's finds at my kitchen table while listening to the Phillies game on a transistor radio. Michael's brachiopod was the best specimen of the day. This brachiopod (CDB1) is approximately 10mm in length and 6mm in width and appears to be **Terebratulina cooperi**, which is an index fossil for the Mount Laurel Formation. CDB1 has an irregularly shaped hole on the pedicle (ventral) valve. The brachidium or lophophore support is visible through this hole (see photos magnification 35X). The lophophore is a brachiopod's feeding/filtering organ. It is located in the mantle cavity (anterior side) of the animal and is supported by a brachidium, a calcareous loop or spire. According to Earthlife.net, there are approximately 350 extant species of brachiopods but over 30,000 fossil species. There are several theories as to why brachiopods have declined in numbers. One is that they were out competed by bivalves especially when confronted with environmental changes. Bivalves occupy a similar ecological niche. Another is that predatory starfish became too efficient at locating brachiopods which are unable to burrow far into the substrate.

I have been collecting fossils for three years. Each new specimen forces me to do research and learn a little more about the world around me . . past and present. I did not know much about brachiopods until my son picked up one with a hole. The best part of collecting are the lifelong memories of time spent with my father and son.

Sources Cretaceous Fossils from the Chesapeake and Delaware Canal, Delaware Geological Survey Special Pub. #18, Lauginiger, September 1988
www.Earthlife.net Index Fossils of North America, 14th printing 1989, Shimer and Shrock
Paleo.cortland.edu Brachiopod: Morphology and Ecology

Another lovely article by a first time writer for the DVPS Newsletter in Feb 2010. See you can do it also. I will be glad to help you out.

DVESS MEETING LOCATION : Centenary United Methodist Church, 151 South White Horse Pike, (route 30) in Berlin, 856-767-3881 or 856-767-7453

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 store fronts 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 **D**elaware **V**alley **E**arth **S**cience **S**ociety, 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

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 in the box on page

To submit an article for publication in the DVESScapades contact the Newsletter Editor. decuzzic@comcast.net, or Delaware Valley Earth Science Society Inc., DVESS, P O Box 372 Maple Shade, New Jersey 08052 or DVESS Website: http://www.dvess.org garyskyrock@comcast.net

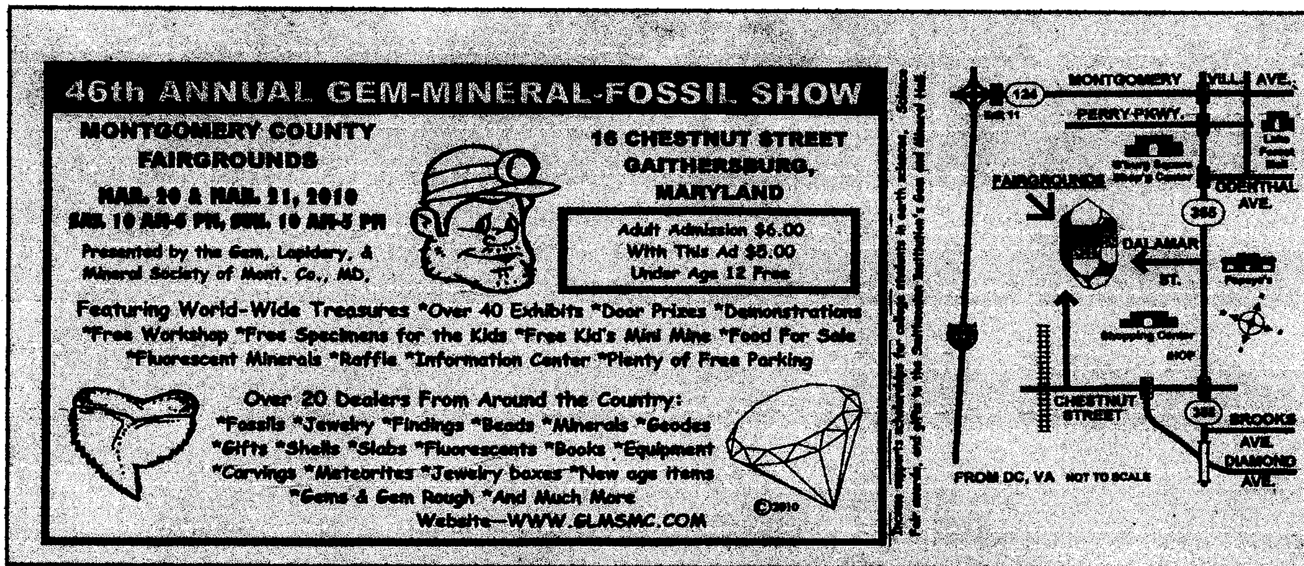
AFMS CODE OF ETHICS (American Federation of Mineralogical Societies)

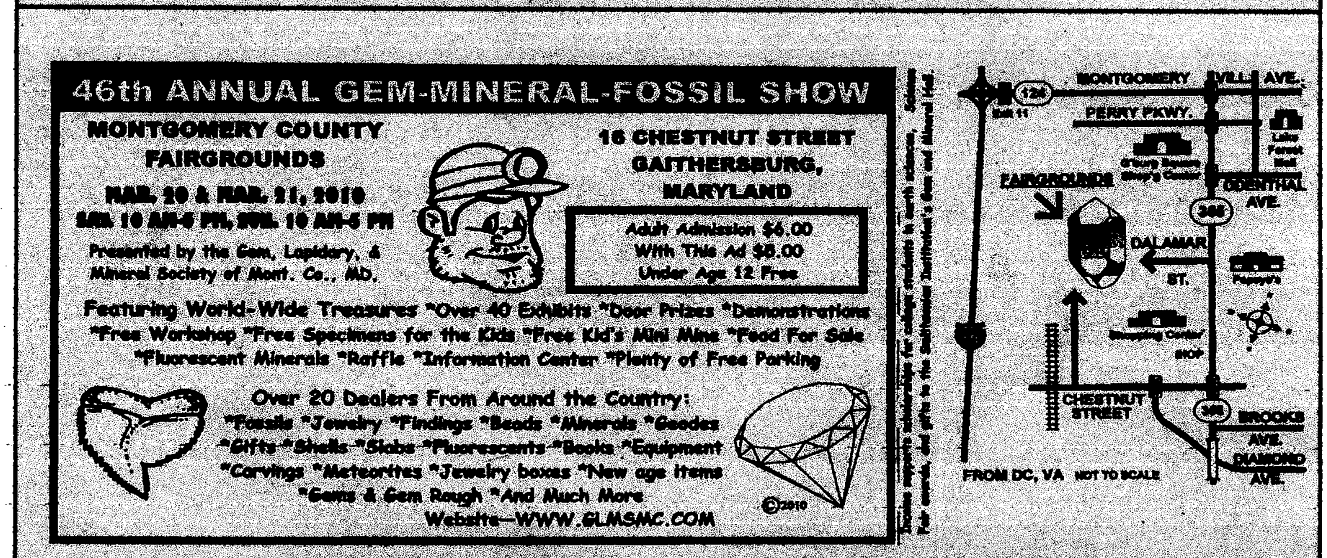
I will respect both private and public property and will do no collecting on privately owned land without the owner's permission.
I will keep informed on all laws, regulations of rules governing collecting on public lands and will observe them.
I will to the best of my ability, ascertain the boundary 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.

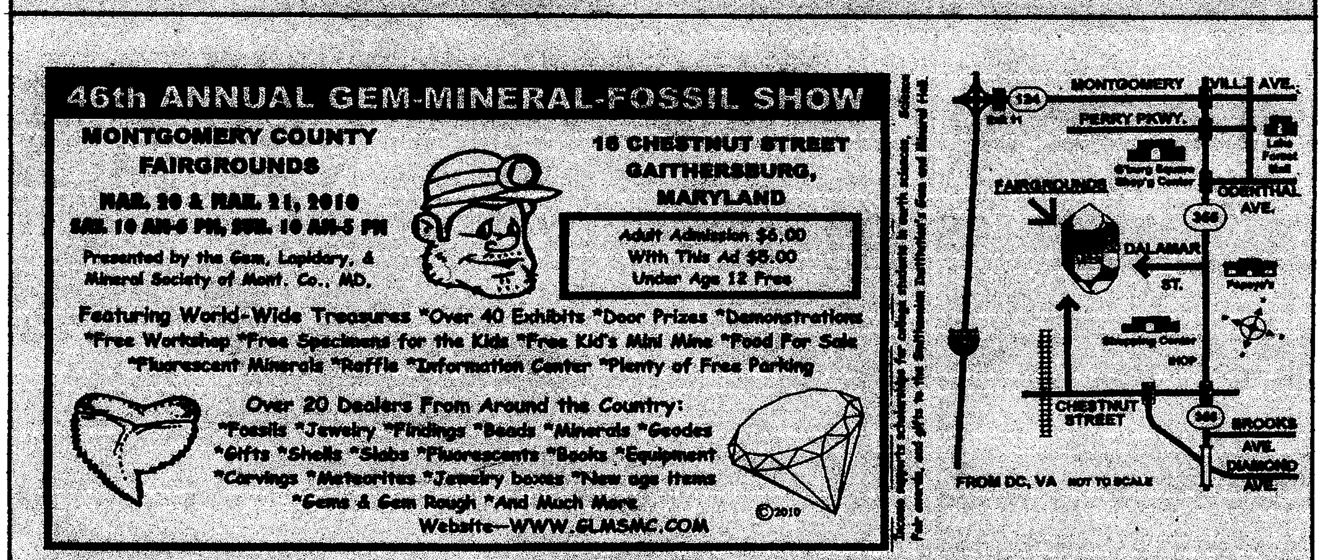
DVESS Directory 2010	**President Grant Elliott 856-728-1731** **gle@verizon.net**
1st Vice President Louis Detofsky	**2nd Vice President Jonathan Feigin**
Jr. Rockhound Coordinator Mil LeCompte **856-783-0969** **works-in-faith@comcast.net**	**Recording Secretary Richard Murray** **bearich@snip.net**
Website Coordinator Terry Wilson **609-714-1309 terry@dvess.org**	**Special Events Coordinator Ann Lynne Benson** **856-783-0969 SeleniteQueen@gmail.com**
Treasurer, Program Chair **Gary Weinstein 856-234-0708 - home** **856-795-5077 - work** **garyskyrock@hotmail.com**	**DVESS Newsletter Editor, Membership Chair** **Carol De Cuzzi** **856-428-0621 - home** **decuzzic@comcast.net or** **DVESS@int-pro.com**

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.

The Coupons on this page may be printed out as many times as you wish and used for the event. Courtesy of the Gem, Lapidary and Mineral Society of Montgomery Co. Maryland for more info WWW.GLMSMC.com







Membership Form start w/ first family member (head of family)

First Name: _____ Last Name: _____

Address: _____ City: _____

State: _____ ZIP+4: _____

Phone: _____ Email: _____

Cell Phone: _____ Profession, School or Major Work _____

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

Okay to share _____
Do NOT share _____

Newsletter Delivery **ONLY** via e-mail

Email _____

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

additional family members to be registered w/ above member

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

additional family members to be registered w/ above member

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) _____

additional members on another paper if needed

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? _____

This message is being passed along to the DVPS and the DVESS membership as a courtesy. DVPS and DVESS have no official stance on this petition.

Delaware **V**alley **E**arth **S**cience **S**ociety, Inc. (DVESS)
P.O. Box 372
Maple Shade, N.J. 08052
DVESS Website : http://www.dvess.org

RETURN SERVICE REQUESTED

Here it comes yet again! Have fun.