

DVESScapades

escapades: interesting, stimulating, exciting activities and adventures



Delaware Valley Earth Science Society Newsletter

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



Meeting: Sept. 13, 2012 8 pm, adults, 7 pm, jrs

Program; SHOW AND TELL is our September program – YOU are the presenters. Bring in the treasures you discovered during the summer, or a “whatsit” to be identified. Our September program is always fun and full of surprises.

[See print info at bottom of news letter](#)

PRESIDENT’S MESSAGE FOR SEPTEMBER 2012 BY ANNLYNNE BENSON

Bill Nye, the Science Guy, has been both supported and criticized for his YouTube video website address for Bill Nye the Science Guy.

<http://www.billnye.com/> “EVOLUTION AND CREATIONISM” that went viral Aug. 23, 2012. Following is a transcript of the video and my comments:

“Denial of evolution is unique to the United States. I mean, we're the world's most advanced technological—I mean, you could say Japan—but generally, the United States is where most of the innovations still happens. People still move to the United States. And that's largely because of the intellectual capital we have, the general understanding of science. When you have a portion of the population that doesn't believe in that, it holds everybody back, really.

Evolution is the fundamental idea in all of life science, in all of biology. It's like, it's very much analogous to trying to do geology without believing in tectonic plates. You're just not going to get the right answer. Your whole world is just going to be a mystery instead of an exciting place.

As my old professor, Carl Sagan, said, "When you're in love you want to tell the world." So, once in a while I get people that really—or that claim—they don't believe in evolution. And my response generally is "Well, why not? Really, why not?" Your world just becomes fantastically complicated when you don't believe in evolution. I mean, here are these ancient dinosaur bones or fossils, here is radioactivity, here are distant stars that are just

like our star but they're at a different point in their life cycle. **The idea of deep time, of this billions of years, explains so much of the world around us.** If you try to ignore that, your world view just becomes crazy, just untenable, itself inconsistent.

And I say to the grownups, if you want to deny evolution and live in your world, in your world that's completely inconsistent with everything we observe in the universe, that's fine, but don't make your kids do it because we need them. **We need scientifically literate voters and taxpayers for the future.** We need people that can—we need engineers that can build stuff, solve problems.

It's just really hard a thing, it's really a hard thing. You know, in another couple of centuries that world view, I'm sure, will be, it just won't exist. There's no evidence for it.”

COMMENTARY BY ANNLYNNE BENSON, DVESS PRESIDENT:

As president of a science club and one of the organizers of organized religion, I am a woman of faith; like Christopher Columbus, I have beliefs for which there is no evidence. Columbus believed the world was round; he had no evidence – they said he was crazy. Galileo believed the earth revolved around the sun; he had no evidence – and was sentenced to house arrest for nine years until his death. Columbus and Galileo had no proof, only informed opinion; time provided the proof.

Uninformed opinions are a dime a dozen and worth much less. Reasonable people can disagree, but they listen to whatever cogent arguments the other side can provide. They educate themselves as much as possible, so as to make informed opinion possible. Bill Nye said, “The idea of deep time, of this billions of years, explains so much of the world around us.” One need not believe in evolution to agree with the concept that the idea of deep time “explains much”.

Bill went on to say, “We need scientifically literate voters and taxpayers for the future.” One need not believe in evolution to agree with this concept either. So, there is – or can be - common ground.

One can believe in genetics without believing in evolution. A brunette couple with a single Irish ancestor produces several brunette children and one red-head; one need not believe in evolution to grasp that this is not necessarily the milkman’s child. If the redhead produces children, there will likely be redheads among them. Such is my own case – the only redhead among my siblings. I have three daughters – one with dark auburn hair, one light auburn, and one strawberry blonde. Evidently, change produces change.

The problem in “proving” evolution is, it takes too long for us to see it. I have never come right out and said that I “believe in” evolution – but I’ll be the first to admit that I can see change happening right before my eyes, right here in South Jersey. It’s the geese.

Canadian geese used to live in Canada – that’s how they got that name. When I moved to New Jersey in 1969, there were no geese on practically every patch of grass in every town. You didn’t have to hopscotch-jump over geese droppings while walking from the

parking lot to the store or office. It was cold here in the winter; the geese flew over on their way south, looking for warmth. They flew over on their way north when it got too warm for them in the south. THEY DIDN'T LAND. If they did stop to grab a bite to eat, they got right back up into the sky and kept going.

No more. It's just not that cold here anymore. Generation upon generation of these geese have hatched, grown up, and made more geese right here, without ever having seen Canada. The geese you saw today, or yesterday, and will see tomorrow don't know anything about Canada; they don't know anything about migrating with the changing seasons. All they know is eat, excrete and make more geese.

Maybe a million years from now, these geese will have done what Darwin said the finches did – undergo physical changes due to the change in their environment and food supply. Only we won't be here to see it and say, "I guess those evolutionists were right, after all. How about that!"

Until then the debate will rage on, partly because both sides are so busy spouting their own beliefs that they don't listen for the kernel of wisdom in what the other side is actually saying, and partly because their minds are already made up and they don't want to be confused with the facts.

Surely, given the evidence that does exist, and the laws of physics and genetics which obviously exist, it should not be too far a leap for some creationists to admit the possibility that once God created, generation followed generation and change followed change resulting in tremendous diversity and things being the way they are today; even the Inquisition concluded that Galileo's theory could be supported as a possibility, if not as an established fact.

I do not stand alone among members of my science club in believing that after God created the universe, evolution either did happen or possibly happened. Jew and Christian alike, we agree with much of what Bill Nye had to say.

* * * *

OFF TO SEE THE WIZARD – On September 13, the day after our meeting, I shall set out to attend the Eastern Federation of Mineralogical and Lapidary Societies' annual convention in Harrisburg, PA accompanied by my intrepid traveling companion Lorraine Campbell. All Presidents of Federation clubs are Directors of the Federation, and as such I shall represent DVESS at all of the appointed meetings.

* * * *

WILDACRES is literally on the top of a mountain. You can sit on a rocking chair between the main building and the building where we have our classes, and gaze out over the valley to the next mountain over. You can get up and walk about 50' to the parking lot behind you, stand at the front of your car, and gaze out over a valley to the next mountain in that direction. And when the wind is blowing up there – look out! Each Wildacres session features a tail-gate sale. There is plenty of time to get to know your fellow classmates and appreciate their work, and maybe take some of it home with you.

The final session for 2012 is just around the corner; there's a wonderful line-up of classes and teachers. The Wildacres Retreat is an extra-special place. Set off the

Blue Ridge Parkway on a private mountain, the campus features wonderful views of the mountains, clean air, and the sounds of nature and people having fun; missing are the sounds of the city – loud radio and TV noises, blaring horns and angry voices.

Now is the time to seriously consider attending. I encourage you to set aside a week in either the fall or next spring (or both) to come to North Carolina and learn a new skill or brush up on your favorite. See pages 10 and 11 at this website:

<http://www.amfed.org/efmls/efjune12web.pdf>

FIELD TRIP – Join us **Saturday, October 6**, for our annual FREE tour of Sterling Mine Mineral Museum – this is a MEMBERS ONLY event. If you have a friend or family who wishes to attend, bring them along and we'll be happy to sign them up as a member. This trip is limited to 15 people, you are advised to SIGN UP as SOON as possible by contacting Mark Leipter or Ann Benson. When we're full, that's it! unless we fill up in sufficient time to implore Sterling to let us bring more folks. Arrive in time to see the September 11 memorial and all of the outdoor equipment displays. Tour begins at 1 pm.

* * * * *

BANQUET – our annual banquet will take place at 6 pm on Saturday, Oct. 20 at the Mandarin buffet restaurant in Cherry Hill at Ellisburg circle (Rt. 70 and Kings Hwy and no, there isn't a circle there anymore). The address is 1631 Kings Highway North Cherry Hill, NJ 08034. Featured speaker will be Ken Leap, Glass Artist Extraordinaire (<http://www.jerseyarts.com/ArtistGallery.aspx?ID=84>, http://www.jkennethleap.com/navigation/jump_bio.htm and <http://www.kenleap.com/>) and son of our longtime treasurer Claire Leap and her husband Bill Leap, past president of the Camden County Historical Society and author of "The History of Runnemede New Jersey – 1626-1976", who served as a speaker for us on numerous occasions. It will be a pleasure having Ken with us at the banquet.

Future Programs:

PROGRAM FOR SEPTEMBER 2012- Show and Tell

It's that time of year again. The program on the 12th will be **YOUR** summer exploits. Bring in your finds and tell us about them. Where you went, what you found and even bring in a 'whatsit' for identification. I know that Lance will tell us about his dino digs in Montana and Gerald and Jonathon went to Maine again. Who else?

October's program will feature Mr. Bob Thompson from the Cumberland County Historical Museum who will tell us about the stone tools made and used by New Jersey natives back in the day before modern tools.

Also in October will be our annual banquet at which Mr. Ken Leap will regale us with new research he is doing regarding the minerals used in the making of red glass. Ken is a well know local glass artist with ties to Wheaton glass works and is the son of past members Bill and Claire Leap. It should be a very interesting program so plan to attend and bring the family. This year the banquet will be on a Saturday evening, rather than a Sunday afternoon, the 20th at 5:30. Same all-you-can-eat buffet location as the last couple of years, Mandarin Buffet at route 70 and route 41. Hope to see you there,

Be safe as you dig for specimens this summer. And remember, the best way to be a great mineral collector is to learn, learn, learn, learn!

From: Discover Magazine Click on highlighted print to go to the article

[When Will We Find Life in Space?](#)

Phil Plait explains how we might seek out aliens.

« [Why Science Can't Replace Religion](#)

[Cut the Penis, Cut the Risk: Why Circumcision Is A Good Choice](#)»

[Will Fracking Help Or Hinder the Fight Against Climate Change?](#)

By [Keith Kloor](#), a freelance journalist whose stories have appeared in a range of publications, from Science to Smithsonian. Since 2004, he's been an adjunct professor of journalism at New York University. You can find him on Twitter [here](#).

When it comes to climate change, the bad news pummels you the way Mike Tyson, in his prime, pummeled opponents into submission. The onslaught is so relentless that sometimes I just want to crumple into a heap and yell:

Make it stop! The latest beat-down, for example, is news of the [record ice shrinkage](#) in the Arctic. That seems to have shaken up a lot of people.

But before everyone sinks into catatonic despair, I want to return to a recent piece of stunningly good news on the climate front. Perhaps you saw the [headline](#) several weeks ago: “U.S. carbon emissions drop to 20-year low.”

The following page –Mineral of the Month — is courtesy of:

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WHAT IS A “MINERAL”?

A mineral, by definition, is . . .

1. **Inorganic**, which means that it is not made by a living organism.
2. **A Solid**. There is one unusual exception. Native mercury is a mineral and is the only metal that is a liquid at normal temperatures.
3. Has a **regular crystal structure**. The crystal structures are described as crystal systems.
4. **Made by nature** which means minerals are not made, directly or indirectly, from human activity.
5. Has a **predictable chemical formula**.

Which of the following are minerals?

Pyrite (“Fool’s Gold”)	Snow
Galena	Ice Cubes
Graphite	Ruby
Cubic Zirconia	Diamond
Fluorite	

For each of these, make a checklist of the 5 points of a mineral’s definition. If it meets all 5 points, it is a mineral ... by definition.\

Triboluminescence: Making Light with Candy

What you will need:

A roll of **Wintergreen Lifesavers**™. No other flavor will work!!! A dark room. A friend to do the experiment with.

What to do:

Step 1: Face a friend in a dark room or under a blanket.

Step 2: Bit into a wintergreen lifesaver with your mouth open! Be sure to really crunch it into lots of little pieces all at once. When you do it right, your friend will see a very fast, small *flash of blue light*.

Step 3: Brush your teeth really, really well!!!!!!!!!!!!

What makes it work? Go to <http://www.waynesthisandthat.com/wintergreen.htm> and find out!



From Grant our esteemed Secretary the released an hour ago. Picture of water on Mars.



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

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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
additional members on another paper 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? _____

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? _____

WE USE a LOT OF Minerals!

In a lifetime, the average American will use a LOT of stuff.
Much of this “stuff” comes from minerals.
In his lifetime, Corundum Carl will use . . .

1,600 pounds of Copper
(from azurite, malachite, cuprite)

32,300 pounds of salt
(halite)

920 pounds of zinc
(from sphalerite)

42,000 pounds of iron ore
(hematite and magnetite)

68,000 pounds of cement
(cement is made from limestone, sand and gravel.
Limestone contains the same material as calcite—calcium carbonate)



1.7 Troy ounces of gold

5,700 pounds of aluminum
(from bauxite)

1,000 pounds of lead
(from galena)

20,500 pounds of phosphate rock

61,000 pounds of other minerals
(like gypsum, spodumene, sulfur, silver, quartz, and fluorite)

the news letter has been shrunk to fit on less printed pages, those of you reading it on the net are free to enlarge it for easier reading. Please contact with your opinion.