

# PEDOLOGUE

• Spring/Summer (2nd 2015 issue) 2015

Newsletter of:  
Mid-Atlantic Association of Professional Soil Scientists  
Edited by Del Fanning  
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**2015 MAPSS Officers – with brief description of some of their duties:**

President: Carl Robinette -- Ex-officio on all committees except Nominations.  
Past President: Brian Needelman -- Chairperson of Nominations Committee  
President Elect: Robert Bricker -- To Develop Programs for his Presidential Year-2016  
Vice President: David Verdone -- Chairperson of Membership and Ethics Committee  
Treasurer: Sarah Roberts -- Ex-officio member of Finance Committee  
Secretary: James Brewer -- Keeps accurate records of MAPSS membership etc.  
Member at Large (1yr): Barry Glotfelty -- Helps organize and promotes Assoc. meetings  
Member at Large (2yr): Nicci Coffie -- In Absence of secretary, record minutes etc.  
Ex officio Member: - Phil King (NRCS MD-DE State Soil Scientist)—consultant to council.

Board of Directors: Board ensures the Council executes its duties, reviews actions of Council, meets with Executive Council at their board meetings etc.

Cliff Stein to serve 1 year

Susan Davis to serve 2 years

Jim Chaconas to serve 3 years

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## **Editor's Comments:**

I'm finally getting out another issue of *Pedologue*. It started out to be the Spring 2015 issue, but it's now mid-July, so I'm calling it Spring/Summer 2015. I start with a picture of me promoting our University of Maryland soil monoliths on Maryland Day, Saturday, April 25, 2015. Ed Landa, my office mate was a great helper and he took my picture in front of the selected group of monoliths that we hauled from cases where they are usually displayed in the basement of H. J. Patterson Hall to where we displayed them in the Animal Sciences Building. In the picture I'm holding a green frog carved for me by Roslyn Orr some years ago from glauconitic clay like that in the monolith of the Colemantown soil from Burlington County, NJ, displayed behind the frog that I made with help of students as part of a NE regional project in 1975, when we then called the soil Marlton. On MD Day we had a bucket of the green clay from the soil and we gave away some small samples for hand manipulation to some highly appreciative folks that came by including a high school student training for state Environthon Contest from Carroll County. To the right of the green soil we displayed the monolith of an anthill on the Beltsville soil from the old University Hopkins Farm (now a shopping center) made by student Calvin High and a fellow student in mid-1970's. The next soil to the right, second from left, is monolith of an oyster shell kitchen-midden soil from Kent County, MD made by student Rob Fields who went on to do soil consulting in VA, and finally the one on extreme right is from the Kenilworth landfill in DC, made by students Mary Patterson before she became Wagner and Art Hathcock and Bob Bracey during the time of the soil survey of Washington, DC, in mid 1970's. The A horizon of that soil was put on as sewage sludge, now more politely called bio-solids. We used to joke that it might contain the poop from federal politicians at the time, maybe



when Nixon was president. We did find some great stuff in the garbage of the pit. A Washington Post Sports Page from 1968 told of Frank Howard of Washington Senators hitting his 44<sup>th</sup> home run that year. There is a story that goes with each of our monoliths, unfortunately only a few of them are written down.

In June I did some more promoting, this time for the 8<sup>th</sup> International Acid Sulfate Soils Conference with a poster that Martin Rabenhorst put together for us and co-authors at the American Society of Mining and Reclamation meeting in Lexington, KY.

Marty took another version of the poster that he presented during the same week at the National Soil Survey Conference in Duluth, MN. My poster now hangs on a bulletin board in the basement hall of the old wing of H.J. Patterson Hall. I'm inserting more comments after the article on 1916 soil collection.

**MAPSS Membership/Business Meeting -- 3/11/15, American Legion Hall,  
Crownsville, Maryland**  
**By MAPSS Secretary Jim Brewer**

**HIGHLIGHTS OF MEETING**

Past President Needelman presided over the meeting; Attendance: approx. 40 current members, new members and guests

Minutes from the 2/26/14 business meeting. No corrections, approved

Minutes from the 1/27/15 Exec. Council meeting. No corrections, approved

Brief discussion on lack of memberships

Treasurer's report for 2014 Budget Summary. No corrections, approved

Nominations for Executive Council – Past President Needelman put together a slate of nominations.

Needelman asked for nominations from the floor. Nominations were closed, voted on and approved as an election.

Results of the election were:

**President Elect – Robert Bricker**

**Vice President – David Verdone** (paper vote between Verdone and Joe Kraft)

**Treasurer - Sarah Roberts**

**At Large Member, 2 year term – Nicci Coffie**

**BOD Member, 3 year term – James Chaconas**

Members already holding office for 2015 were/are:

President: Carl Robinette

Past President: Brian Needelman

Secretary: James Brewer

Member at Large (1yr): open (Editor's comment, this position became open when David Verdone, who held this position, was elected Vice President. This position has now been filled by volunteer Barry Glotfelty.

Ex officio Member: Phil King-(NRCS State Soil Scientist)

Board of Directors:

Susan Davis - to serve 2 years

Cliff Stein - to serve 1 years

President Needelman called for **COMMITTEE REPORTS**

Membership and Ethics – Sec. Brewer informed the membership of new members for 2015: Eme Furlong, Patrick Moreland, Ben Marshall, Ian Rodway, and joined at meeting Chris Seitz, John Desmond, Maggie Goldman, Amanda Garzio-Hadzick and Barret Wessel.

Education and Public Relations -Chairperson **Fanning** stated he completed 2 newsletters for 2014 and one for 2015 so far; Dr. Fanning discussed the monolith collection at UMD; approx. 130 monoliths, nomenclature needs to be updated; Thanked undergraduates for contribution to collection.

Robinette question “retain old horizon nomenclature?”

Fanning stated he would try but may put together a book (like museum does) which contains info on them.

Needelman stated monolith collection will go wherever Soils Dept goes.  
King discussed need for MAPSS to write a letter of support for monolith collection.  
Needelman stated YES

#### UMD Update:

Needelman discussed 2014 accomplishment of the UMD Soil Judging Team and introduced team members who were present (Sara Mack, Barret Wessel, Chris Seitz, John Desmond). He thanked MAPSS and its members for their continued contributions to the team. The Team finished 4th place in regional, missing 3rd by 2 pts, thus not eligible to go to nationals in Spring 2015.

Dr. Rabenhorst discussed this year regional will be held at Ohio State in fall and nationals at Kansas St. He also mentioned the International contest where UMD graduate Tyler Witkowski finished 2<sup>nd</sup>. Tyler is now with NRCS as a soil scientist in MN.

Dr. Rabenhorst presented the MAPSS Roy W. Simonson Scholarship award (\$1000) to UMD student Jaclyn Fiola, who wasn't able to be at the meeting because of another commitment.

#### **After dinner, Updates:**

Joe Valentine (Delaware Valley College) thanked MAPSS and some of its members (Wah, Demas, Kraft) for assistance at National Soil Judging Contest, hosted by Del Val in spring 2014.

#### Potential Fundraising 2015 Events:

President Robinette updated membership with thoughts on possible fund raising events for 2015, which include Training on Hydrologic Soil Groups, and K value for engineering groups (some of these soil properties are now included in regulations; big change in HSG could mean big change in dollars for projects.)

#### Training on Highly Erodible Soils and Web Soil Survey

Maybe 3 one day sessions across the state and 1 field day centrally located.

Member Collins asked question on profit margin for these events.

King stated usually \$3,000-5,000 sometimes up to \$10,000

Member Wah stated need to do hydric soil training again, very profitable.

King –maybe next year

Jellick- need to set up CEU credits.

Past President Needelman expressed encouragement “We have our Mission”.

**UMD** – Brian Needelman reported: Dr. Bruce James is retiring (position probably won't be filled for two years); Josh McGrath moved to Kentucky; UMD now has a hiring freeze in place; HJ Patterson Hall is still being renovated, Soils Group in ENST (Environmental Science and Technology) Dept. may be moving out of Patterson Hall.

**UDE** – Phil King represented; Soil program finished at UDE; MAPSS member Laf Erickson teaching a soils lab at UDE in April.

**NRCS** – King discussed update of Web Soil Surveys every Oct.; Now have gridded soil survey data; he updated membership on NRCS vacancies;

NOTE: meeting was followed by presentations by:

Phil King - "State and Transition of Soil Surveys in NRCS"

Marty Rabenhorst - "Overview of plans for the 8th International Acid Sulfate Soils Conference"

Maggie Goldman - "Soil survey disaggregation using GIS: Finding the soils within the polygons"

Brian Needelman - "The Incipient Movement for Fundamental Changes to Soil Taxonomy"

**Soil Treasure Unearthed: Article Submitted by Susan Y. Demas, MLRA Soil Scientist NRCS and Eileen Miller, Resource Conservationist, NJ NRCS**

Editor's comment: This article is written in first person by Susan Demas, but she wishes to credit Eileen as co-author for contribution of pictures and other information.

Recently, Eileen Miller a colleague of mine with NJ NRCS sent me an email concerning an unusual collection which had been given to her by a local science teacher. Eileen is a resource conservationist, with NJ NRCS specializing in soil health. Eileen's name had been given to the local science teacher by Angela Andreoli, Cumberland County NJ Farm Service Agency as a possible contact for finding a permanent and suitable resting place for the unusual collection. Along with Eileen's email came pictures taken by her of this unique and very special collection, which just so happens to be soil collected one hundred years ago.



**Photograph of the 1916 U.S. soil collection and publication, "Important Soils of the United States", United States Department of Agriculture, Bureau of Soils, December 1, 1916. Soils of each Region of the U.S. are represented.**

Issued Dec. 1, 1916.

U. S. DEPARTMENT OF AGRICULTURE.  
BUREAU OF SOILS.

# IMPORTANT SOILS OF THE UNITED STATES.

ISSUED TO ACCOMPANY A COLLECTION OF  
SOILS AND SUBSOILS (IN 13 BOXES) FOR  
USE OF SCHOOLS AND COLLEGES TEACHING  
AGRICULTURE AND PHYSICAL GEOGRAPHY.



WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1916.

Close-up Photograph of the bulletin "Important Soils of the United States, U.S. Bureau of Soils , 1916" that was issued to accompany a collection of soils and subsoils (in 13 boxes) for use of schools and colleges teaching agriculture and physical geography.



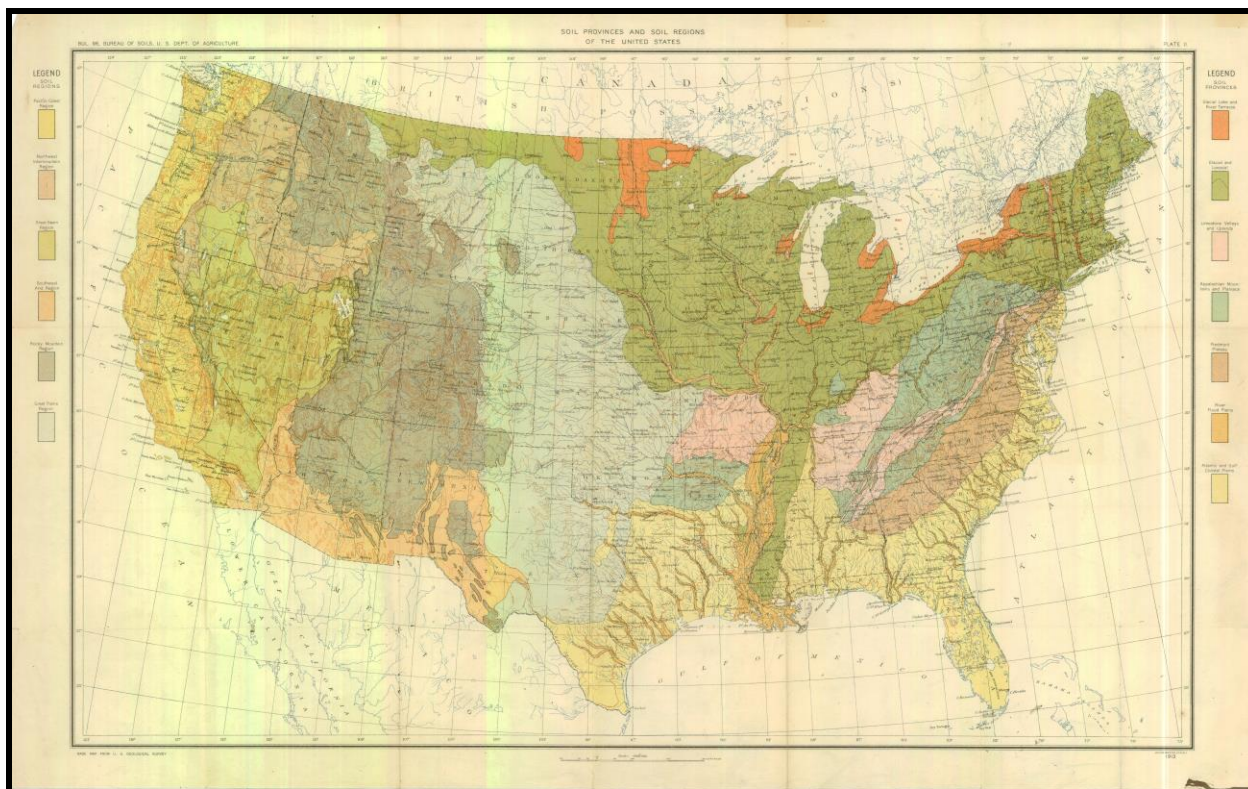
**Photograph of a close up of the collection by U.S. Regions. Each soil series present in the collection consists of a glass vial sample of top soil and a vial of subsoil.**

This particular 1916 soil collection has had an interesting history. The teacher responsible for conveying this treasure to Eileen is Jill Guenther, a science teacher with the Cumberland County NJ School District. Jill, a teacher for the past 28 years, was given the collection by another teacher who came across it in one of her classroom cabinets. According to Ms. Guenther “I’ve been teaching Earth and Space Science for the past 28 years at Vineland High School. I’ve had a love of the Earth’s features and soils for as long as I can remember...probably starting with my mother’s family, who originally were Vineland, NJ farmers, emigrated from Italy. About 10 years ago, a colleague noted my fascination, and remembered finding a soils collection in a classroom cabinet.” Ms. Guenther has been using the collection ever since to teach students about weathering and erosion. Ms. Guenther also noted that the bulletin accompanying the collection made mention that the kits were made for schools. Worried that the soil samples could be lost or broken she decided that the collection should have a suitable home and reached out to Eileen, who shares her love of soils.

Immediately upon receiving Eileen’s email about the collection, I contacted Dr. Del Fanning, because I thought that if anyone knew of the collection it had to be Del, and for assistance in trying to find a permanent home for the collection. Del had numerous ideas such as possibly housing the collection at the World Soil Museum in the Netherlands, the Smithsonian Institution, the National Agriculture Library (NAL), the University of Maryland Archives, or even possibly the “Dig It” Exhibit, all of which were given as suggestions to Eileen. Del contacted others including Dr. Edward Landa, Adjunct Professor, Department of Environmental Science and Technology, University of Maryland and Dr. Dennis Merkel, Professor in the School of Biological Sciences at Lake Superior State University concerning the U.S. Bureau of Soils’ collection to find out whatever he could. Dr. Merkel, who recently did much research on some early history of the U.S. Bureau of Soils while spending a sabbatical leave at the University of Maryland, happened to have a copy of the bulletin. He remarked that there were no authors listed, but that it was his opinion that the publication no doubt was abstracted from: *Soils of the United States*”. (Edition, 1913.), United States Department of Agriculture, U.S. Bureau of Soils, Bulletin 96, 1913 by Curtis F. Marbut, Hugh H. Bennett, Jessie Erwin (J.E.) Lapham, and M. H. Lapham.

According to Dr. Landa “I think the term "physical geography" in the subtitle of the bulletin is reflective of Curtis Marbut's influence. He had long standing, strong ties to the physical geography community from his days at University of Missouri and extending to his career at the Bureau of Soils.”

Macy Lapham having come from Michigan State University, was born in Okemus, Ingham County, Michigan on 10 Apr 1874. He began his career in 1898 as a soil mapper in the Western U.S. in California and Arizona. His earliest mapping involved the use of a horse and buggy and I can’t believe I used to complain about the government giving employees vehicles without radios. He eventually rose in the ranks to become Inspector of the Western Division, Bureau of Soils. As Inspector he spent time traveling around the Country with the soil survey party leaders, correlating soils. His brother J.E. spent a good part of his career conducting soil surveys in the Mid-West in places like Texas, Kansas, Arkansas, Indiana and even North Carolina.



**Map of the United States by Region showing 13 regions taken from “Soils of the United States”. (Edition, 1913.), United States Department of Agriculture, U.S. Bureau of Soils, Bulletin 96, 1913. Photo courtesy of Dr. Dennis Merkel.**

In the meantime, I was able to contact Dr. Douglas Helms, retired historian, USDA NRCS. Although Dr. Helms at the time was unfamiliar with the collection, he noted that the U.S. Bureau of Soils did exhibit such collections at world fairs. Dr. Helms thought that the NAL would be the best fit for the collection and also provided a contact for the “Special Collections” section with the NAL. After evaluating all options, it appears for now, the 1916 soil collection will be headed to the NAL for possible display for its 100<sup>th</sup> Anniversary. A fitting current end to indeed a real “Soil Treasure”. Dr. Helms provided additional information and research into the proper citations for the collection and publication.

P.S. Thanks to Eileen, I did have an opportunity to view the soil collection in person and was curious about the “Important Soils of the United States, Eastern Soil Province, Atlantic and Gulf Coastal Plain, soil set as the map

accompanying it placed Delmarva Peninsula in this set. To my surprise lo and behold was a set of vials for the Sassafras Series, the State Soil of Maryland, and, if I remember correctly, the only mesic series in that Regional set. Besides Sassafras, other series in that set were Portsmouth, Norfolk, Orangeburg, Crowley, and Houston.

### **About the authors:**

Eileen Miller is a Soil Health Specialist with the USDA Natural Resources Conservation Service. She holds a Bachelor of Science degree in Environmental Studies from the Richard Stockton College of NJ and is a graduate of the NJ Agricultural Leadership Development Program. Eileen is married and has two children, ages 10 and 12.

She began her career as an Earth Team Volunteer, and has spent the majority of the last twenty years as a Soil Conservationist, working in several NJ field offices. Currently, she provides training to field office personnel, landowners, farmers, urban & community gardeners, science teachers, master gardeners, and anyone else interested in maintaining or improving the condition of their soil. Eileen is passionate about her purpose and enjoys working with others to promote awareness of soil as a critical and essential natural resource

Susan Demas, an active MAPSS member, is a graduate of the University of Maryland, College Park, MD with a double major in soil science and turf grass management. She is a 20 year employee of The USDA NRCS. Besides having started her career as a soil conservationist in Tennessee, she mapped soils as a field soil scientist and project leader for NRCS in Maryland and Delaware. Susan is presently a MLRA Soil Scientist working in the Mid-Atlantic Coastal Plain. Susan is also serving a three year term on the Executive Council of the West Virginia Association of Professional Soil Scientists.

**Editor's Comments – It appears likely that a ceremony will be held on Aug. 19 at the National Agriculture Library in Beltsville, MD, when the 1916 collection will be officially donated to NAL. This is being worked out by Maxine Levin of NRCS Beltsville and Susan Fugate at NAL and others including the wonderful folks in NJ who brought the collection to light. There is hope that representatives of the soil science community including MAPSS President Carl Robinette and possibly SSSA President Carolyn Olson and other officials will be present for this event. We will ask MAPSS secretary Jim Brewer to send a notice to MAPSS members when further details are known of the time and place within NAL where this event will take place.**

**Susan Demas sent an earlier draft copy of this Pedologue Article to Eric Brevik, current chair of the SSSA Pedology Division. He sent a very congratulatory reply suggesting additional opportunities for publicizing the collection and its history. So that Eric's suggestions will not be lost, I am inserting his message to Susan below.**

**From:** Brevik, Eric [eric.brevik@dickinsonstate.edu]  
**Sent:** Friday, June 26, 2015 11:28 PM  
**To:** Demas, Susan - NRCS, Hammonton, NJ  
**Cc:** Delvin S. Fanning  
**Subject:** RE: 1916 U.S. Soils Collection

Dear Susan,

Thank you for letting me know about this. Not only am I the current chair of the SSSA Pedology division, I am also in my second 5-year term as the SSSA Historian and have a strong interest in soil science history. This is absolutely fascinating!

As far as publicizing this, I have several ideas:

- 1) There is a History, Philosophy, and Sociology of Soil Science newsletter that reaches an international audience (co-sponsored by SSSA), currently edited by Dr. Thomas Sauer of USDA-ARS in Ames, Iowa. I suggest sharing the news article with Tom to be included in that newsletter.
- 2) Another outlet that will reach a wide variety of soil scientists and that would accept a news article like this is Soil Horizons. They have no page charges, will publish figures in color for free, and every member of SSSA has access to it as part of their SSSA membership. I think they would be quite interested in publishing this. Between the MAPSS newsletter, History, Philosophy, and Sociology of Soil Science newsletter, and Soil Horizons, a lot of people would be able to see the news about this collection.
- 3) SSSA now has a Soil Education and Outreach division (I am a past chair of that division), and I think a presentation on this at their 2016 meeting (to be held in Phoenix, AZ) would be a great way to promote this outstanding collection during its 100<sup>th</sup> anniversary.

Let me know what you think. I'm willing to help you accomplish any or all of the above.

Sincerely,  
Eric

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#### **Calendar of some coming events:**

**August 19, 2015.** Probable date for the 1916 soil collection, see article about it above, to be officially accepted by the USDA National Ag. Library, Beltsville, MD.

**Nov. 15-18, 2015.** American Society of Agronomy, Soil Science Society of America Annual Meeting, Minneapolis, MN. <https://www.acsmeetings.org/> .

**July 17-23, 2016.** Eighth International Acid Sulfate Soils Conference, University of Maryland, College Park, MD. <http://www.midatlanticsoilscientists.org/acid-sulfate-soils-conference>

**Future articles etc.** Pedologue needs articles, pictures, poems, cartoons, letters to the editor or other things soil scientists and/or other readers of Pedologue may be inspired to submit. Please submit such items to the editor, preferably to [DelvinDel@aol.com](mailto:DelvinDel@aol.com) . Be an author, support your newsletter, it's a way to promote yourself and your work and things we all need to know about soils and the environment.