

PENN papss SOIL

Newsletter of the **Pennsylvania Association of Professional Soil Scientists** Volume XXIV, No. 1

P.O. Box 61035, Harrisburg, PA 17106-1035

April 2000

The President's Corner

State of the Association Address

by John D. Chibirka

PAPSS President

'There was considerable discussion of the name of the association, especially relative to its abbreviation or acronym. A motion was defeated to use the name "Keystone Association of Professional Soil Scientists". A motion

was defeated to use the name "Pennsylvania Association of Professional Field Soil Scientists". Finally a motion was soundly approved to utilize the proposed "Pennsylvania Association of Professional Soil Scientists".' - Minutes Book of the Pennsylvania Association of Professional Soil Scientists-Organizational Meeting, March 22, 1975



PAPSS President, John Chibirka (on right) awarding Soil Science Scholarship

It is an honor to serve as President of the Pennsylvania Association of Professional Soil Scientists (PAPSS) and doubly so for serving it in the year 2000, the twenty-fifth anniversary of our establishment. These are exciting times we live in today, on the cusp of a new millennium. It is a point in time to look into the future and determine what role PAPSS will play in our society, but it is also a point in time to look back and reflect on the accomplishments PAPSS has made in the last twenty-five years. I accept this appointment with fervor as we plan for the future while we remember and commemorate the past. This, our **silver anniversary year**, is indeed special for us and we should celebrate it in a style it deserves. Let me tell you some of the plans the Board of Directors has come up with already. Just remember that plans can become reality only when everyone gets involved!

Mark your calendars for **August 18th and 19th, 2000** because it's on this Friday and Saturday that we plan to

celebrate our **Silver Anniversary**. Plans have begun to present a technical session on **Fragipans: Their Occurrence, Classification and Genesis** and also to celebrate our 25th year. It is no coincidence that the session dates are immediately following

Ag Progress Days at Penn State's Rock Springs Agronomy farm, running Tuesday through Thursday, August 15-17, 2000. I assume many PAPSS members would be attending APD's and then want to stay over in State College for the technical session. In addition to the field trip, some activities may be recognizing charter members and deceased members, commemorating honorary members, presenters of past technical sessions and past Presidents, and an evening picnic and social. Conference location, lodging and accommodations and field trip sites have yet to be determined. The Board plans to mail the meeting announcement in the early summer.

The year 2000 marks many milestones in Pennsylvania history. In addition to PAPSS' silver anniversary, this is Pennsylvania's Centennial of the Soil Survey (1900-2000), which commenced one year after the U.S. Soil Survey was initiated in 1899. The USDA-Natural Resources Conservation Service in association with PAPSS has been actively involved in remembrance of the national Centennial and will also be involved in the state one. As part of the recognition, all fifty states named a State Soil. PAPSS named Hazleton as the Pennsylvania State Soil and Governor Tom Ridge proclaimed it as such during Soil Stewardship Week April 26 - May 2, 1999. It is PAPSS' intention to further Governor Ridge's Proclamation and seek official status by proposing a bill to the State Legislature. Vice President Joe Valentine will be heading up this effort and he welcomes any help you may offer.

IN THIS ISSUE

- Winning PAPSS Slogan
- Though the Years with PAPSS
- Soil Taxonomy on CD Rom
- Soil Survey Horizons
- 25th Anniversary Meeting Plans
- Land Use and Soil Scientists
- Volunteers Needed for Anniversary Meeting
- PAPSS at the SEO Conference
- Web sites for Soil Scientists

affiliated with



A Federation of Certifying Boards in Agriculture, Biology, Earth and Environmental Sciences

"I am pleased to inform you that I am appointing The Pennsylvania Association of Professional Soil Scientists as a member of the Sewage Advisory Committee under the authority granted by Section 4 of the Pennsylvania Sewage Facilities Act (35 P.S. §750.4)." —James M. Seif, Secretary Pennsylvania Department of Environmental Protection, February 8, 2000.

As you can see, PAPSS has made further progress in being involved with Pennsylvania's sewage program. As Mark Mills stated in his reply to Secretary Seif, 'Our Association is excited about the opportunity to provide meaningful technical input to this important regulatory review committee'.

In addition to the summer technical meeting and 25th anniversary celebration, the PAPSS Board has several other topics for technical sessions on the table. Some are:

- Continued Discussion of Determining the Hydraulic Capacity of Soils by Morphological Indicators
- USDA- Natural Resources Conservation Service Field Indicators for Hydric Soils
- On-site Characterization and Remediation of Soils
- Drip-Irrigation Technology for On Site Wastewater Treatment

That was then...

"Roy Matelski, representing the Legislative Committee, led a discussion of the of the draft proposed legislation regarding registration of soil scientists in Pennsylvania". —Minutes Book of the Pennsylvania Association of Professional Soil Scientists-Organizational Meeting, March 22, 1975

This is now...

"Laurel Mueller has been appointed as chairperson of a subcommittee of the Legislative Committee to explore the possibility of soil science certification in Pennsylvania". —PAPSS Board Meeting Minutes, January 18, 2000

Some things haven't changed much over the last twenty-five years. But that doesn't mean we've given up. As a matter of fact, I think with Laurel leading the charge, we will finally break through and become recognized as the soil science authority in Pennsylvania.

In closing, I hope you are as excited as I am about our silver anniversary. To be an active, informed and beneficial society that fosters the profession of soil science to protect the environment and educate the public of soil stewardship is, in itself, something to be proud of. But to do it for twenty-five years and to continue to reach out to new forums and audiences as the years go by is even more remarkable. Please get involved with our celebration because it only comes around only so often.

John D. Chibirka

"Soil Science has Unlimited Horizons"

Is the winning PAPSS Slogan.

Thirty six entries were submitted for the PAPSS slogan and the winner, who will have her 2000 PAPSS paid by the Association, and will receive a free copy of the promotional items using the slogan is PAPSS member Tara Harlan. Tara is currently living in California and continues her PAPSS membership.



**PAPSS Slogan Winner
Tara Harlan**

The PAPSS Board voted on the winning slogan during the February Board Meeting. Eight members submitted slogans for the contest. Some of the other "non winning" slogans are presented elsewhere in the newsletter.

Through the Years...

A Look Back at PAPSS over the Last Twenty-five Years

(1975-2000) by John D. Chibirka

In this column over the next few newsletters I will continue to highlight some of the more memorable events that have taken place in PAPSS over the past 25 years. In thinking of a title for the column I was reminded of country singer Kenny Rodgers' Through the Years and it seemed appropriate. But on the other hand, maybe I should be using the lyric from legendary poet and singer Jerry Garcia of the Grateful Dead What a Long Strange Trip it's Been.

One of the many perks that the President-elect receives early on in the term is the inheritance of boxes and folders full of past **Pennsoil** newsletters, minutes of Board meetings and the like. Really, I don't mind. I guess I'm a packrat and never throw anything away.

Well my fellow packrats, now is the time you've been waiting for and this is the place you've been looking for! I ask you to gather all those boxes and bags, folders and files full of PAPSS memorabilia and go through them. **Pennsoil** newsletters, particularly the first 15 years (1975-1990), field trip packets, minutes of Board and/or business meetings, and most wanted of all ... photographs.

Ah! Photographs. Especially those pictures where we were all a little thinner and younger with a lot more hair, wearing those bell-bottom jeans and polyester shirts with wide lapels. Soil science seemed a



bit more chic back then. Labeling the pictures with as much information as possible would be greatly appreciated.

If anything looks worthwhile to save, please do so. The Board is gladly taking donations towards a PAPSS archive. If the materials you send to me are something you cherish, I will send them back once we've chronicled all the information or used it for the 25th Anniversary Celebration. Make sure you identify your name on everything and specify if you want the item returned, so it can be returned or credited accordingly.

Send to: John Chibirka
478 North Church Road
Wernersville, PA 19565

NRCS Web Sites of Interest to Soil Scientists

National Science and Technology Consortium

www.ftw.nrcs.usda.gov/consortium/consort.html

Grazing Lands Technology Institute

www.ftw.nrcs.usda.gov/glti/homepage.html

National Plant Data Center (Award Winning site)

<http://plants.usda.gov>

National Soil Survey

www.nssdc.nrcs.usda.gov

National Resources Inventory and Analysis Institute

www.statlab.iastate.edu/survey/NRIAI

National Water and Climate Center

www.wcc.nrcs.usda.gov

Soil Quality Institute (Download Fact Sheets)

63rd Friends of the Pleistocene

The 63rd Friends of the Pleistocene is scheduled for June 2-4, 2000 in the Connecticut Valley. The subject is "A New Drainage History for Glacial Lake Hitchcock: Varves, Landforms, and Stratigraphy." **Registration is due by May 1, 2000** at a cost of \$65.00 or a student fee is \$45.00. Additional information can be obtained by contacting Julie Brigham-Grette, at Department of Geosciences, University of Massachusetts, Amherst, MA 01003 phone number 413-545-4840. Trip leaders include Janet Stone (USGS), Jack Ridge (Tufts), Tammy Rittenour (Univ. Nebraska), Julie Brigham-Grette (UMASS) and others.

Soil Taxonomy, Second Edition

Soil Taxonomy has been revised and reprinted for the Soil Survey Centennial. The new, second edition of Soil Taxonomy is available in hard back book, CD-Rom, or is downloadable from the Internet. To order:

Publication:

Superintendent of Documents

U.S. Government Printing Office

Phone 202-512-1800

Fax 202-512-2250

GPO Web site: <http://www.gpo.gov>

Price: \$84.00

Stock Number: 001-000-04663-2

Soil Taxonomy Web Site:

<http://www.statlab.iastate.edu/soils/soiltax>

CD Rom Version: call Margaret Hitz USDA-NRCS, 402-437-4002 or email her at margaret.hitz@nssc.nrcs.usda.gov

NASIS- The National Soil Information System

The focus of the National Cooperative Soil Survey is shifting from producing static printed soil survey reports to providing a dynamic resource of soils information for a wide range of needs. The National Soil Information System, which replaced the State Soil Survey Database, is the core component of this vision and is designed to manage and maintain soil data from collection to dissemination. Soil data is estimated to be a 5 billion dollar national asset. NASIS allows soil scientists to not only manage soil data, but to generate soil interpretations using fuzzy logic and customer supplied criteria. NASIS maintains point data, soil survey management information, information about soil survey areas, legends, data map units, horizons, horizons, surface features and much more. Currently NASIS can export data to NRCS field offices in two formats, one in an MS Access data base for use with the NRCS Soil Data Viewer, a ARCVIEW extension for using soil data. Plans for late this year are to download all the soil data to a Data Warehouse. You can find our more about NASIS by going to the NASIS web site:

<http://nasis.nrcs.usda.gov>

Questions about NASIS and soil data can be directed to Panola Rivers, NRCS, Soil Scientist, or any NRCS soil survey project leader.

Mark Your Calendars

Upcoming Events

April 22, 2000 - *Earth Day*
April 30 - May 7 - *Soil Stewardship Week*
August 15-17, 2000 - *Ag Progress Days*
August 18-19, 2000 - *PAPSS Silver Anniversary*

www.iastate.edu/survey/SQI

Social Sciences Institute

people.nrcs.wisc.edu/socsciinstitute

Watershed Science Institute

www.geology.washington.edu/~nrcs-wsi

Wetland Science Institute

www.pwrc.usgs/wli

Pennsylvania Digital Soil Surveys

<http://lal.cas.psu.edu/usdanrcs.htm>

PAPSS At SEO Conference

The Pennsylvania Association of Professional Soil Scientists was an exhibitor at the PA-SEO Conference. Mark Mills, Bruce Willman, and Joe Valentine, Joe Lasko, Laurel Mueller, and Lew Auchmoody staffed the display. More than 350 SEO's, engineers, surveyors and agency representatives attended the two day conference. The PAPSS display received a lot of attention and positive feedback. PAPSS was one of 18 exhibitors. As part of the display, Soil Scientist Consultants Lists and PAPSS Applications were handed out. Joe Valentine also arranged a soil texture test with analyzed samples and "tube soil profiles" of Hazleton soil were available.



Bill Davis and Joe Valentine (on right) at the PAPSS display during the SEO Conference.

PAPSS 25th Anniversary Bumper Stickers to be Available Soon

Expect to receive a copy of a PAPSS 25th Anniversary bumper sticker with an upcoming mailing notice for the 25th Anniversary Meeting. The Bumper sticker was developed by Joe Valentine and includes the PAPSS logo, the Association name, the years 1975-2000 and a large 25th Anniversary.

25th Anniversary Time Capsule

PAPSS Member Jake Eckenrode has come up with the suggestion that we create and "bury" a PAPSS 25th Anniversary Time Capsule during the 25th anniversary summer meeting in August. Anyone who would like to help Jake pursue this idea, can contact him at 814-335-5071 (H) or 814-234-0835(W). Jake would like to have the time capsule buried on the PSU Agronomy Farm which will be a stop on the field trip soils tour.

Volunteers Needed to Help with the Field Trip Guide

John Chibirka is seeking volunteers to help develop and assemble the Field Trip Guide for the PAPSS 25th Anniversary Summer Meeting. If you are interested, call John at (610)607-6368(H) or (610)736-3220(W).

Land Use, Soil Scientists, and Pennsylvania

"Governor Ridge's new state budget allocates \$135 million to implement the second year of Pennsylvania's Growing Greener environmental investment. The Governor also used the budget to call for "Growing Smarter"- A new plan to help Pennsylvania communities better control land use."- PA DCNR March 2000 Resource Newsletter. The Governor's 21st Century Environment Commission identified LAND USE as the most pressing problem facing the Commonwealth. What is the roll of Soil Scientists in helping the Commonwealth face these land use issues? The Governors 2000-2001 budget proposes allocating the money to several state agencies including DEP, DCNR, PDA and PENNVEST. How will Pennsylvania be able to "Grow Greener" and "Grow Smarter" without the help and input of Soil Scientists? There has never been a better time for Soil Scientists to convey their knowledge of the capabilities, limitations, and potentials of soils to help people understand and use their soils wisely. Become involved, share your expertise, to learn more about the budget: visit www.state.pa.us.

Earth Day -April 22, 2000

This Earth Day: Help a child realize the wonder and importance of the soils on our earth. Teach them to appreciate all the things that come from soil, what the soil does, and how the earth belongs to all generations.

Soil Survey Horizons

Soil Survey Horizons is a professional newsletter to let soil scientists in the field communicate with each other.

Appropriate articles, announcements and news items may be submitted for possible publication in the newsletter. It is published quarterly. Subscriptions are \$13.00 per year and are mailed to: Soil Science Society of America, Attn: Soil Survey Horizons, 677 South Segoe Road, Madison, WI 53711-1086. Include your name, Address, and subscription fee. (or visit www.soils.org)

NOTE: PENNSOIL Newsletter now accepts advertisements, contact the PAPSS BOARD for information.

We welcome Thomas E. Calhoun, Program Manager, Soil Survey Division, as our guest author for the Spring issue. Tom has had wide experience in the soils arena. Prior to his current assignment, he was a soil scientist in New Mexico, Pennsylvania, Florida, and Nevada. He had four international assignments: Lashkar Gah, Afghanistan; Georgetown, Guyana; Lusaka, Zambia; and St. Petersburg, Russia. jab

One View of the Future

by Thomas E. Calhoun,
Program Manager, NRCS,
Soil Survey Division,
Washington, DC

What is our vision for the National Cooperative Soil Survey program?

Now that the initial soil survey of private lands in the U.S. is almost complete, we need to guide the soil survey program beyond just updating and maintaining soil surveys and into a direction that will keep the program viable and valuable to the American public. We have the basic resource data needed for National strategic resource planning. We also have the obligation to explain to the public that soil resources are a strategic, limited resource that must be sustained to meet domestic and international needs. NRCS must become an advocate and steward for the world's soil resources—not just an erosion control agency.

To do this, we must as an agency change the way we think.

NRCS currently uses soil survey information for the remediation of problems stemming primarily from the 1930's Dust Bowl. We are still basically dealing with the legacy of past mistakes. Our programs remain focused on reducing erosion. We may call them different names, such as water quality (keep the sediment and associated chemicals out of the water supply), air quality (keep the sediment and associated chemicals out of the air), watershed planning (keep the sediment and associated chemicals within the watershed), and EQIP (water quality, air quality, and erosion control), but they are still fundamentally erosion-control programs. Do we want to get ahead of the curve—to help people learn to manage fragile resources in a total resource manner—or do we want to stand on the sidelines and again help repair damage after the fact?

The NRCS Strategic Plan currently has no objective for being stewards of the Nation's soil resources. Instead, it has objectives that make the agency an advocate for wetlands, grazing lands, wildlife habitat, watersheds, and cropland. We are advocates for land use instead of advocates for the resource itself. As part

of an agency that uses soil information as the fundamental resource for all it does, I find it distressing that we don't highlight the importance of soil by identifying healthy, productive soils as our number one strategic objective.

If we are truly to be advocates for the soil resource, we must shift the focus of our program and:

- Modernize soil surveys in ways that will support this proactive application of information;
- Develop a totally digitized soil layer for the U.S. (at a minimum) as a tool for evaluation and extrapolation of ideas;
- Apply the concepts of soil quality;

**We must help people understand soil!
We must develop a dynamic soil survey program that is responsible to customers, promotes the wise use of soil resources, provides global standards, and is of service to science and our Nation.**

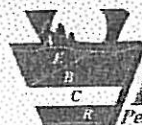
- Develop indicators of sustainability to be evaluated;
- Establish threshold values to gauge against in managing soils;
- Develop GIS tools to analyze for the most-sustainable soil use alternatives;

Continued on page 4

Calhoun, continued from page 3

- Establish a long-term soil health monitoring program;
- Understand the dynamics of our Nation's land resources;
- Develop educational programs for the public;
- Develop cause-and-effect scenarios to help land managers predict the impact of their land management strategies;
- Be able to tell people what they can do with their soil, not what they can't;
- Provide soil-function interpretations (soil as a water filter, soil as a degradation medium, soil as a structural support, etc.)
- Develop tools to assist farmers/communities/watersheds to develop a balance of soil functions most appropriate for their particular conditions
- Be proactive in protecting strategic, limited soil resources wherever they occur.

We must help people understand soil! We must develop a dynamic soil survey program that is responsible to customers, promotes the wise use of soil resources, provides global standards, and is of service to science and our Nation.



papss

Pennsylvania Association of Professional Soil Scientists

P.O. Box 61035
Harrisburg, PA
17106-1035

The Pennsylvania Association of Professional Soil Scientists (PAPSS) is a non-profit organization dedicated to the advancement of soil science and the promotion of the professional status of soil scientists in Pennsylvania. The association was founded in 1954 and has since grown to become one of the largest and most active soil science organizations in the United States. PAPSS provides a wide range of services to its members, including professional development opportunities, networking opportunities, and advocacy on behalf of the soil science profession. The association also publishes a journal, the *Pennsylvania Soil Science Journal*, which is a leading source of information on soil science research and practice in the state. PAPSS is committed to the highest standards of professional conduct and to the advancement of the soil science profession in Pennsylvania.

Our Journal

The *Pennsylvania Soil Science Journal* is a peer-reviewed journal that publishes original research articles, review articles, and short communications. The journal is published quarterly and is available to members of PAPSS at a special discount rate. The journal is a valuable resource for soil scientists and other professionals in the field, providing them with the latest information on soil science research and practice in Pennsylvania. The journal is also a valuable resource for the general public, providing them with information on the importance of soil science and the role of soil scientists in society. The journal is published by the Pennsylvania Association of Professional Soil Scientists (PAPSS) and is available to members of PAPSS at a special discount rate.

The *Pennsylvania Soil Science Journal* is a peer-reviewed journal that publishes original research articles, review articles, and short communications. The journal is published quarterly and is available to members of PAPSS at a special discount rate. The journal is a valuable resource for soil scientists and other professionals in the field, providing them with the latest information on soil science research and practice in Pennsylvania. The journal is also a valuable resource for the general public, providing them with information on the importance of soil science and the role of soil scientists in society. The journal is published by the Pennsylvania Association of Professional Soil Scientists (PAPSS) and is available to members of PAPSS at a special discount rate.

The Pennsylvania Association of Professional Soil Scientists (PAPSS) is a non-profit organization dedicated to the advancement of soil science and the promotion of the professional status of soil scientists in Pennsylvania. The association was founded in 1954 and has since grown to become one of the largest and most active soil science organizations in the United States. PAPSS provides a wide range of services to its members, including professional development opportunities, networking opportunities, and advocacy on behalf of the soil science profession. The association also publishes a journal, the *Pennsylvania Soil Science Journal*, which is a leading source of information on soil science research and practice in the state. PAPSS is committed to the highest standards of professional conduct and to the advancement of the soil science profession in Pennsylvania.

The Pennsylvania Association of Professional Soil Scientists (PAPSS) is a non-profit organization dedicated to the advancement of soil science and the promotion of the professional status of soil scientists in Pennsylvania. The association was founded in 1954 and has since grown to become one of the largest and most active soil science organizations in the United States. PAPSS provides a wide range of services to its members, including professional development opportunities, networking opportunities, and advocacy on behalf of the soil science profession. The association also publishes a journal, the *Pennsylvania Soil Science Journal*, which is a leading source of information on soil science research and practice in the state. PAPSS is committed to the highest standards of professional conduct and to the advancement of the soil science profession in Pennsylvania.

The Pennsylvania Association of Professional Soil Scientists (PAPSS) is a non-profit organization dedicated to the advancement of soil science and the promotion of the professional status of soil scientists in Pennsylvania. The association was founded in 1954 and has since grown to become one of the largest and most active soil science organizations in the United States. PAPSS provides a wide range of services to its members, including professional development opportunities, networking opportunities, and advocacy on behalf of the soil science profession. The association also publishes a journal, the *Pennsylvania Soil Science Journal*, which is a leading source of information on soil science research and practice in the state. PAPSS is committed to the highest standards of professional conduct and to the advancement of the soil science profession in Pennsylvania.

The Pennsylvania Association of Professional Soil Scientists (PAPSS) is a non-profit organization dedicated to the advancement of soil science and the promotion of the professional status of soil scientists in Pennsylvania. The association was founded in 1954 and has since grown to become one of the largest and most active soil science organizations in the United States. PAPSS provides a wide range of services to its members, including professional development opportunities, networking opportunities, and advocacy on behalf of the soil science profession. The association also publishes a journal, the *Pennsylvania Soil Science Journal*, which is a leading source of information on soil science research and practice in the state. PAPSS is committed to the highest standards of professional conduct and to the advancement of the soil science profession in Pennsylvania.

The Pennsylvania Association of Professional Soil Scientists (PAPSS) is a non-profit organization dedicated to the advancement of soil science and the promotion of the professional status of soil scientists in Pennsylvania. The association was founded in 1954 and has since grown to become one of the largest and most active soil science organizations in the United States. PAPSS provides a wide range of services to its members, including professional development opportunities, networking opportunities, and advocacy on behalf of the soil science profession. The association also publishes a journal, the *Pennsylvania Soil Science Journal*, which is a leading source of information on soil science research and practice in the state. PAPSS is committed to the highest standards of professional conduct and to the advancement of the soil science profession in Pennsylvania.