



MAY 2010

The Newsletter of the Pennsylvania Association of Professional Soil Scientists
PO Box 61035, Harrisburg, PA 17106-1035

Inside:

- 2 SCS/NRCS celebrates 75 years
- PAPSS members attend Penn State seminar
- 3 State House Resolution No. 618 honors Garland Lipscomb
- 4 National Resources Inventory Report

Annual Meeting and Technical Session Soil and Specialty Agriculture

October 2010

PAPSS Sponsors Training for Supplements to Army Corps of Engineers Wetland Delineation Manual **by Laurel Mueller**

On April 8 and April 27, 2010, PAPSS hosted training for wetland delineators at the DCNR Loyalsock State Forest Resource Management Center in Laporte, Sullivan County, PA. The focus was the Northcentral and Northeast Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual (1987). The purpose was to disseminate federal updates to consulting soil scientists, wetland biologists, ecologists, and regulators, related to data collection and report content requirements to support the mapping of jurisdictional wetland boundaries.



Frank Plewa discusses the revised data forms in the Regional Supplement.

Since the advent of the 1987 Corps Manual, there have been many advancements in defining and documenting the presence or absence of wetlands.

Specifically, since 1987, the scientific community developed the hydric soil indicators, as well as techniques to quantify vegetative dominance, through field trials and peer review. While we continue to implement the "3-parameter approach" which was established in the 1987 manual, the regional supplements add new wetland data forms to the requirements for report submission. Use of the supplements has been going "online" in each region of the U.S. for several years, with the final regions being Northeastern and Northcentral in March 2010, soon to be followed by the Eastern Mountains and Piedmont Supplement.



Sell-out crowds attended on April 8th and April 27th.

The training sessions in April addressed the unique soils and plant communities which formed in landscapes comprised of glacial till deposits. Wetlands with buttressed root hemlock stands with sphagnum moss are typical of this region.

Training instructors were Frank Plewa of the U.S. Army Corps of Engineers Baltimore District from Carlisle PA, Mike Leggiero of the Corps Philadelphia District from Gouldsboro PA, and Mallory N. Gilbert, consulting soil scientist from Troy NY.

Seminar organizers were PAPSS members Laurel F. Mueller and Steven J. Bason. Attendees included 130 agency representative and consulting wetland specialists from PA, NY, NJ, DE, MD, and WV. With full house participation, a waiting list for another session was generated, and intense interest was expressed for a field component for this training, which the PAPSS Board will consider. Slides for the presentation were compiled for download, and will be available at an FTP site in the near future. The interim supplement is available at http://www.usace.army.mil/cecw/pages/reg_supp.aspx. ■

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75th Anniversary of the Soil Conservation Service - April 2010

In the 1920s and 1930s, Hugh Hammond Bennett, a soil scientist with the USDA, laid the foundation for the Soil Conservation Service by recognizing the threat of soil erosion. He worked to create and disseminate conservation ideas specific to soil types and land use practices.

In 1933, the Soil Erosion Service, predecessor to the Soil Conservation Service and NRCS, began working with farmers in the Coon Creek watershed of southwestern Wisconsin to innovate conservation practices such as contouring, terracing, and stripcropping to protect soil from erosion and to provide benefits throughout the watershed.

Congress passed the Soil Conservation Act in April of 1935, effectively creating the Soil Conservation Service. Hugh Bennett served as the first chief of the Service from 1935 to 1952. The first conservation district was the Brown Creek district in North Carolina. The conservation districts assisted farmers with land use and soil preservation.

The Soil Conservation Service was renamed the Natural Resource Conservation Service in 1994 in recognition of the broader scope of activities covered by the agency.



The goals of the NRCS are to:

- Assess the resources on the land, the conservation problems and opportunities.
- Draw on various sciences and disciplines and integrate all their contributions into a plan for the whole property.
- Work closely with land users so that the plans for conservation mesh with their objectives.
- Through implementing conservation on individual properties, contribute to the overall quality of the life in the watershed or region. ■

Graduates Attend Round-Table Discussion at Penn State By Michael Lane

On January 22, 2010, seven PAPSS members spoke at a seminar for faculty, staff, and students of the Department of Crop and Soil Sciences at Penn State in University Park. PAPSS President Steve Dadio provided a brief introduction of PAPSS and discussed the qualifications for and benefits of membership. Steve described the main areas of employment and activities for PAPSS members, including sewage disposal, stormwater management, nutrient management, soil mapping and classification, and federal, state, and local government.

The goals of the seminar were to acquaint Penn State with PAPSS, to discuss current issues facing soil scientists, and to promote increased cooperation between Penn State, regulators, and consultants in areas beyond agriculture and nutrient management. With cutbacks in governmental soil scientists, along with increased regulation in the areas of wetlands, stream buffers, and stormwater management, it is increasingly important for universities to provide pertinent research for those drafting regulations and to provide adequate coursework to soil science students.

Representing PAPSS were Steve Dadio, Michael Lane, Bruce Willman, Tim Ratvasky, Mike Brown, Steve Levitsky, and, with special dispensation, Ed White. Thanks to Patrick Drohan and Steve Dadio for setting up the event and promoting PAPSS and the application of soil science in Pennsylvania.

The video can be viewed at http://soilislife.psu.edu/video/papss_roundtable.cfm. ■

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The Stevens Hydra Probe soil sensor is the most robust and unique soil sensor available. Users can select up to 22 parameters, including:

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House Resolution No. 618

The following resolution in honor of PAPSS member Garland Lipscomb unanimously passed the PA House of Representatives on February 8, 2010.

A RESOLUTION

Recognizing Garland H. Lipscomb, United States Department of Agriculture-Natural Resources Conservation Service Retired Pennsylvania State Soil Scientist.

WHEREAS, Mr. Garland H. Lipscomb has earned recognition for his contributions to soil science in this Commonwealth, including soil surveys of Cumberland, Dauphin, Juniata, Luzerne, Mifflin, Monroe and Perry Counties; and

WHEREAS, In 1981 Mr. Lipscomb became the first African-American State Soil Scientist in the history of the United States Soil Survey upon his appointment as Pennsylvania State Soil Scientist; and

WHEREAS, Mr. Lipscomb's early experiences on a farm near Farmville, Virginia, prepared him well for his experiences at Virginia State College and his highly productive career; and

WHEREAS, Mr. Lipscomb pursued undergraduate studies in agriculture and then agronomy, specializing in soil science; and

WHEREAS, After his 1963 graduation Mr. Lipscomb worked briefly in eastern Montana as part of a mobile team for the Bureau of Recreation of the United States Department of the Interior; and

WHEREAS, Mr. Lipscomb began working on soil surveys and soil survey publications in this Commonwealth in December 1964, when he joined the Dauphin County work unit of the Soil Conservation Service, now the Natural Resources Conservation Service; and

WHEREAS, Mr. Lipscomb moved to the Cumberland County unit in June 1965; and

WHEREAS, From February 1966 through the 1974 survey completion, Mr. Lipscomb was Party Leader for the Monroe County unit; and

WHEREAS, Joining the State Office as Assistant State Soil Scientist in July 1974, Mr. Lipscomb assisted with field program appraisals and contributed to or managed soil survey manuscripts; and

WHEREAS, Mr. Lipscomb served as State Soil Scientist from 1981 until his retirement in March 1994; and

WHEREAS, Throughout his career Mr. Lipscomb worked cooperatively with the College of Agricultural Sciences of The Pennsylvania State University, the Department of Environmental Resources, the Department of Agriculture and the State Conservation Commission; and

WHEREAS, The House of Representatives respectfully honors Mr. Lipscomb's status as the first African-American Soil Scientist in our nation and expresses sincere gratitude for his distinguished work on behalf of our Commonwealth; therefore be it

RESOLVED, That the House of Representatives recognize Garland H. Lipscomb, United States Department of Agriculture-Natural Resources Conservation Service Retired Pennsylvania State Soil Scientist; and be it further

RESOLVED, That a copy of this resolution be transmitted to Garland H. Lipscomb. ■



The Editor's first half-scale monolith. Chester silt loam

Conferences and Events

>>>National Cooperative Soil Survey Northeast Regional Conference

Elizabethtown, Pennsylvania - June 6-11, 2010

June 9 – one day field tour

Single-day registration is available for the field tour

Covering current Issues in Watersheds – Highlighting Geomorphic and Anthropogenic imprinting on Soils from the Landscape to Pedon Scale.

“Land User, Stormwater Systems and Soils, Legacy Sediments, Restoration and Mill Dams, Hydric Soils, Field Indicators and Wetlands, River Terraces, Geomorphology, and Terroir”

Last Registration is due by May 17!

For conference agenda information contact

Ed White (717)237-2207, ed.white@pa.usda.gov

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>>>PAPSS Annual Meeting and Technical Session

Tentative - Soils and Specialty Agriculture - October 22-23, 2010

National Resources Inventory Report – December 2009

The most recent National Resources Inventory Report (NRI) provides nationally consistent data on the status, condition, and trends of land, soil, water, and related resources on the Nation's non-Federal lands for the 25-year period 1982–2007. Non-Federal lands include privately owned lands, tribal and trust lands, and lands controlled by State and local governments. Some highlights include:

- Cropland acreage declined from 420 million acres in 1982 to 357 million acres in 2007. About half of the reduction in cropland acreage is due to enrollments of environmentally sensitive cropland in the Conservation Reserve Program. The share of noncultivated cropland — permanent hayland and horticultural cropland — increased from 11 percent to 15 percent of all U.S. cropland over the period.
 - Soil erosion on cropland decreased 43 percent between 1982 and 2007. Water (sheet and rill) erosion declined from 1.68 billion tons per year to 960 million tons per year, and erosion due to wind decreased from 1.38 billion to 765 million tons per year.
 - About 24 percent (or 326 million acres) of the non-Federal rural land base is classified as prime farmland. This represents a 14-million-acre loss since 1982; most of this loss was due to development.
 - About 40 million acres of land were newly developed between 1982 and 2007, bringing the total to about 111 million acres; that represents a 56 percent increase. (In PA, 2.8 million acres developed in 1982, 4.4 million acres in 2007.) This means that more than one-third of all land that has ever been developed in the lower 48 states was developed during the last quarter century.

View the report at http://www.nrcs.usda.gov/technical/nri/2007/2007_NRI_Summary.pdf. ■

Soil Surveys as "Historical Replicas" are available in PDF format:

http://soils.usda.gov/survey/printed_surveys/

Soil Taxonomy 11th edition

ftp://ftp-fc.sc.egov.usda.gov/NSSC/Soil_Taxonomy/keys/2010_Keys_to_Soil_Taxonomy.pdf

*Title photo – Chimney Rocks overlook, Michaux State Forest
Highfield, Catoctin, and Myersville series*

Comments or contributions? mlane@brickhouse-environmental.com

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