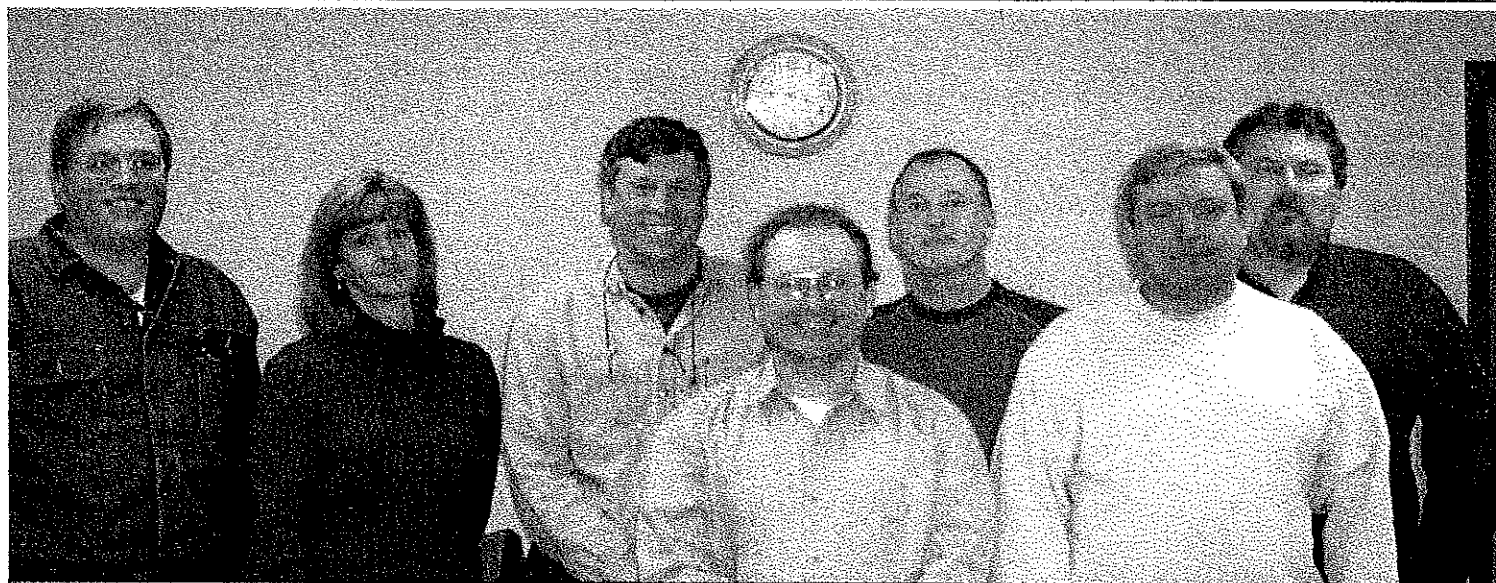


PENNSOIL

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

March 2003
www.papss.org



2003 PAPSS Board of Directors

L to R: Bruce Willman-President; Nancy Sansoni-Secretary; Larry Hepner; Darryl Fritz; Mark Mills; John Hudak-Treasurer; Tim Craul-Vice President.

PAPSS 2002 Annual Meeting and Technical Session

The 2002 PAPSS Annual Meeting was held on December 13, 2003 at the Dauphin County Agricultural Center. About 25 members attended the business meeting and 30 people attended the technical session. Speakers included Dr. Phillip Owens, Congressional Science Policy Fellow "Experiences as a Policy Fellow," Dr. Henry Lin, PSU "Hydropedology and its effect on Effluent Renovation," and Joe Valentine "Waste Water Renovation."

2003 PAPSS Committee Chairs

Constitution and Bylaws	Bruce Willman	717-901-8838
Program	Tim Craul	814-865-2306
Scholarship	John Chibirka	610-372-4655
Nominations	John Chibirka	
Editorial	Ed White	717-237-2207
Legislative	Joe Valentine	215-345-5545
Fund Raising	Joe Valentine	

Additional Ad-hoc Committees

Web Master	Nancy Sansoni 215-675-9907
Smithsonian Exhibit	PA Committee
Consultants List	Bruce Willman
World Congress	Ed White

Bruce Willman can be contacted to volunteer your assistance for any PAPSS committee. Help is always needed to improve our ability to achieve the goals of the organization. The PAPSS Board has many worthwhile events schedule for 2003, become a part of them by volunteering for a committee.

Earth Day - April 22, 2003

Now is the time to begin planning for your educational activities for Earth Day (Earth Week) 2003. The theme for this years Earth Day Materials provided by PA DEP is "Sustainability for Pennsylvania - It's In Our Hands." A variety of educational materials is available from DEP and a special web site www.SustainablePA.org has been developed to serve as a resource for Earth Day 2003. For more information about Earth Day visit the PA PowerPort at www.state.pa.us PA Keyword "Earth-Day Central."

Field Book for Describing and Sampling Soils

Version 2.0 of the Field Book for Describing and Sampling Soils has been printed. This version substantially updates the 1998 version 1.1. The Field Book (waterproof in 6 X 8 inch binder can be ordered from two sources:

1. US Government Printing Office (GPO) by calling their toll free phone number (1-866-512-1800). Ask for Stock # 001-000-04706-0 (Field Book for Describing and Sampling Soils).
2. On the internet, go to <http://www.gpo.gov> select US Government On-Line Bookstore, then under "Search & Sales Product Catalogue" Enter Field Book for Describing and Sampling Soils.

The cost is \$24.00 (no additional cost such as shipping or handling). Delivery by the US Postal Service. Rush deliveries can be made in 48 hours for an additional \$8.00. The book contains three main sections: Site Descriptions, Profile Descriptions, and Geomorphic Description, with supplemental sections on Geology, Soil Taxonomy, Legal Location, Field Sampling, and tables for measurements and conversions.

DEP Sewage Advisory Committee Meetings

These meetings are open to the public and lunch is provided by DEP.

Alternate Technology Subcommittee of the Sewage Advisory Committee Meeting Schedule for 2003

Committee meetings will begin at 10:30 a.m. in Room 105 of the Rachel Carson State Office Building. The meeting dates are as follows:

March 20, 2003

October 1, 2003

Contact: Milt Lauch, Bureau of Water Supply and Wastewater Management, P.O.

Box 8774, Harrisburg, PA 17105-8774, 717-787-8184, or e-mail

mlauch@state.pa.us

Sewage Advisory Committee (SAC) Meeting Schedule for 2003. Meetings will begin at 10:30 a.m. in Room 105 of the Rachel Carson State Office Building. The meeting dates are as follows:

March 27, 2003

October 8, 2003

Contact: Milt Lauch, Bureau of Water Supply and Wastewater Management, P.O.

Box 8774, Harrisburg, PA 17105-8774, 717-787-8184, or e-mail

mlauch@state.pa.us

Soil Resources Wanted

In conjunction with the Smithsonian Soils Exhibit, SSSA is developing a list of educational resources for teachers and libraries. If your organization has materials, publications, Web site links, videos, experiments, etc., forward a copy to Huda AlTannir at headquarters, or e-mail haltannir@agronomy.org

In Memoriam

Edward H. Sautter (former State Soil Scientist for Connecticut and Rhode Island) passed away on January 27, 2003 and is survived by his wife Jean, two sons and two daughters. A memorial service was held at Light on the Hill Christian fellowship, South and South Park Streets in Willimantic, CT at 2:00pm on February 1, 2003. Cards may be sent to Jean Sautter, 518 Chaffeeville Road, Storrs, CT 06268

Mr. Sautter came to Pennsylvania as a soil scientist in 1964. He worked on the Lackawanna-Wyoming Soil Survey for three years, then from 1967-1972, was a Field Soils Specialist in the Bloomsburg Area Office. He was involved in many NE and Northern Pennsylvania Soil Surveys and field reviews during that period and in the Cooperative Soil Sampling and Characterization program, collecting many of the soil monoliths that were made. Ed left Pennsylvania in 1972 to become State Soil Scientist in Connecticut where he retired in 1990 after 40 years of federal service. After his retirement, Ed continued to be an active voice for Soil Science within the Northeast through the Society of Soil Scientists of Southern New England (SSSSNE).

He worked for SCS and NRCS for 37 years in Montana, Nebraska, Pennsylvania, Connecticut and Rhode Island. He was an early supporter and innovator of Technical Soil Services, the updating of soil surveys, and the need to provide digital data. He was also a founding member of the Society of Soil Scientists of Southern New England (SSSSNE) and a SWCS Fellow.

The Board of Directors for SSSSNE is in the process of setting up a memorial fund, to which members and others may donate. The goal is for the SSSSNE to sponsor the Windsor Soil monolith at the Smithsonian Institute in Ed's memory. Ed worked tirelessly for years to formally recognize Windsor as the state soil. It would be a wonderful tribute to Ed to have his name forever displayed along with the Windsor soil in the Smithsonian. If you wish to donate, please send a check payable to SSSSNE and designate it for the Sautter fund.

Mail to: P O Box 258, Storrs, CT 06268

Texas Geoscientists Licensure

In September 2002, the Texas legislature approved and the Governor signed into law an act licensing Geoscientists (geologists and soil scientists) in Texas. This tremendous accomplishment by Texas Geoscientists is a result of many years of hard work and financial support by many people. The Texas Geoscientists welcome those of us who are outside Texas to apply for licenses. My application is on the way. I encourage all of you to take advantage of the "grandfather" opportunity open until August 31, 2003. By applying prior to that date, licensing will simply be a matter of submitting your application, transcript, references, and appropriate fees and you don't have to take the test.

Please give serious consideration to applying. This is the best way those of us can support the Texas Geoscientists in their effort to advance our profession for the benefit of all of us. Besides, Texas is a big state and we very likely may find consulting opportunities there. All of the forms and information for application are available on-line. Just go to the website of the Professional Geoscientists Association of Texas (PSSAT), and navigate to the documents. -Cliff Landers.

editors note: see the web site for additional information
<http://www.aipg-tx.org/anmviewer.asp?a=35&z=5>

Environmental Soils Recruitment Materials

David M. Sylvia, Professor and Head

Department of Crop and Soil Sciences, The Pennsylvania State Univ.
 e-mail: dmsylvia@psu.edu

Over the past few months we have been developing new recruiting materials for our Environmental Soil Science major. I invite you to go to <http://esoils.psu.edu/downloads.html> where you can download a PDF version of our new recruitment flier and a brief PowerPoint show that introduces the major. Both of these tools direct students to the program website -- <http://esoils.psu.edu/> -- where additional information is available. Please use these materials as you interact with various groups that should know about this major. For example, it may be appropriate for you to use one or all of the PowerPoint slides in your talks to student and extension groups (the PowerPoint show has preset timings for slide advancement, but you can turn this off by selecting on the menu bar -- Slide Show, Set Up Show, and Manual advance).

Please contact me if you wish to obtain high-quality hardcopies of the flier for distribution, or if you

have comments and suggestions on our recruiting efforts. Thank you for your support of Environmental Soil Science!

Panola Rivers Moves to Texas

PAPSS Member and NRCS Soil Scientist Panola Rivers transferred to a new job with the NRCS National Cartographic and Geospatial Center in Fort Worth, Texas. Panola will be working on the National SSURGO Team. Panola will be working with soil databases and spatial (digital) soil survey data.



Experience Required:

B.S. in Soil Science; 2 yrs or more experience in characterization, classification, mapping, and interpretation of soils as they relate to the function of on lot sewage disposal systems; and certification as a sewage enforcement officer

-OR-

B.S. in Environmental or Soil Science or equivalent degree and a membership in the Pennsylvania Association of Professional Soil Scientists (PAPSS)

Position Description:

Individual will be working as a qualified soils consultant to local county governmental agencies in southeastern Pennsylvania and will be responsible for evaluating and documenting soil suitability for on lot sewage disposal systems. In addition, the individual will conduct site assessments, groundwater and soil sampling, monitor well installation, installation of wells for remediation, preparation and review of work and sampling plans, and preparation of written reports such as investigation reports, preliminary assessments, site inspection reports and technical memoranda.

Interested applicants can send resumes to:

Weston Solutions, Inc.
 1400 Weston Way
 P.O. Box 2653
 West Chester, PA 19380
 Atten: Ken Cowan, Bldg 4-2

Training for SEO's

The Pennsylvania State Association of Township Supervisors web site lists training for Sewage Enforcement Officers:
<http://www.psats.org/>

PAPSS Display Available for Member Use

Our recently remodeled PAPSS display is available for PAPSS Members to use during meetings and events. It has most recently been used at the PA SEO Conference in Grantville, PA. The display includes information on the STATE SOIL Legislation. The remodeling included a new professionally done header and a new main panel describing PAPSS. The remaining portion of the

www.papss.org

Our Purpose

- To provide a forum for pedagogical information
- To encourage and enhance communications with other technical disciplines
- To serve as a body of opinion on matters relating to soil classification and interpretations
- To maintain professional standards in the application of soil science

Membership
Professional
Apprentice
Associate
Student
Honorary



P.O. Box 4143, Harrisburg, Pa. 17105-1995

display can be tailored for a specific meeting. Additional panels need to be developed. Photographs and ideas are needed. On the left is the main panel of the display. To schedule the use of the display call Bruce Willman, President

(bruce.p.willman@saic.com)
717-901-8838. Suggestions and materials for the display can be forwarded to Ed White

edgar.white4@verizon.net
We are seeking photographs of "Soil Scientists at Work"

for a panel on PAPSS Member Services.

Advisory Group and other interested people at November SSSA meeting in Denver.

NRCS Unveils Web-Based Registry for Technical Experts

DAVIS, Calif., March 4 (PRNewswire) -- The U. S. Department of Agriculture's Natural Resources Conservation Service today unveiled a web-based registry of technical experts that will make it easier for landowners to meet conservation goals by finding service providers online.

"NRCS is committed to improving the environment by helping landowners meet their conservation goals," said NRCS Chief Bruce Knight. "This online registry will build a new industry of certified conservation professionals from the private sector, nonprofit organizations and public agencies to provide direct technical assistance and deliver conservation services to landowners and others." TechReg -- the technical service provider registry -- will allow interested individuals and organizations to apply and request certification on the Internet. Users of TechReg will be able to list their services, credentials, accomplishments and progress. In addition, farmers and ranchers will be able to locate and choose technical service providers authorized to provide services to their area. "TechReg is a good example of the Bush Administration's commitment to e-government to deliver programs more effectively and efficiently through electronic means," Knight said. The 2002 Farm Bill expanded the availability of technical assistance to landowners by encouraging the use of technical services providers to assist USDA in delivering conservation services. Information on services available from USDA Service Centers is online at

<http://www.sc.egov.usda.gov>. Additional information on TechReg is available at <http://techreg.usda.gov>.

American Society of Agronomy Soil Science Society of America

The Northeastern Branch Meeting Title Summary Submission is now open at: <http://www.asa-cssa-sssa.org/branch/ne/> The deadline for submission is April 3, 2003 - 4pm (central).

2003 ANNUAL MEETING NORTHEAST BRANCH
AMERICAN SOCIETY OF AGRONOMY AND
SOIL SCIENCE SOCIETY OF AMERICA

The United States Consortium of Soil Science Associations (USCSEA)

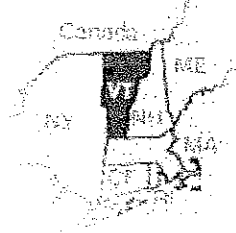
The USCSEA hosted a teleconference on February 20, 2003, President Bruce Willman represented PAPSS. The minutes of this teleconference are posted on the USCSEA web site -- <http://soilsassociation.org> under the heading "Organizational Operations".

Highlights of the teleconference:

- Notes on soil science exhibit being planned at the Smithsonian's Museum of Natural History at Washington, D.C. Excellent discussion lead by Jim Ware, Soil Survey Division and Valerie Breunig, SSSA.
- Progress on USCSEA brochure.
- Plans for national meeting of USCSEA Council,

June 29 to July 2, 2003

**Radisson Conference Center
Burlington, Vermont**



We hope you plan to attend the 2003 NEBASA and NESSSA Annual Meeting this year in Burlington, Vermont. The planning committee has been working hard to put together an interesting symposium and the tours will introduce you to a very diverse

Vermont agricultural landscape. As usual, there will be an opportunity for attendees to present volunteer papers and poster presentations, so we encourage you to submit a title as soon as possible. We hope to see many agronomy and soils graduate students from the region participate in the student presentation competition.

Unlike most of past NEBASA annual meetings, we have chosen to move it "off campus" and right in the heart of Burlington at the Radisson Conference Center. They have nice facilities for our size of organization and are offering a special rate for overnight accommodations during the conference. The big bonus is that Conference Center is located in the heart of Burlington just across the street from the Inner Harbor on Lake Champlain and within walking distance to parks, shops and the Burlington bike path which is great for walking, skating or biking. Hopefully, you will be able to get all the information that you need about the meeting on this website. However, if you have any questions, please feel free to contact me or one of the members of the planning committee. We look forward to seeing you on June 29th.

Anthropogenic Soils Data Available on CD

The International Committee on Anthropogenic Soils (ICOMANTH) was established in 1995 and charged with defining appropriate classes in Soil Taxonomy for soils that have their major properties derived from human activities. The committee established a list of human activities that result in such significant alteration of soil properties and diagnostic horizons that previous classification and interpretations are no longer applicable. The committee is using circular letters to gather information for establishment of criteria to identify soils that form in anthropogenic materials or that are significantly altered by human activities. Efforts in this regard will help us recognize human activities in our soil survey work.

One of the new objectives for the ICOMANTH Committee is to "Develop a collection of soil descriptions representing an array of anthropogenic soil morphologies. These soil profiles can be used to propose new horizon nomenclature, terms for describing anthropogenic soil properties, and to document and describe human-influenced features for these soils." The National Soil Survey Center (NSSC) worked with John Galbraith at Virginia Tech to produce a CD to fulfill the objective mentioned above and to provoke lively debate and discussion. More information on the CD is at the official Web site for ICOMANTH at <http://clie.cses.vt.edu/icomanth/>.

The Soil Survey Division and the NSSC have actively pursued the collection of data for anthropogenic soils since the early 1970s, when Horace Smith published the soil survey for Washington, D.C. The Soil Survey of LaTourette Park on Staten Island, New York, followed 20 years later. Both of these surveys and other detailed profile descriptions, characterization analyses, and urban inventory data for anthropogenic soils are examples of information contained in the CD.

For additional information, contact:

Henry R. Mount

National Soil Survey Center

(402) 437-5384

henry.mount@nssc.nrcs.usda.gov

The Geology of Pennsylvania

Back by Popular Demand

The Bureau of Topographic and Geologic Survey is pleased to announce the reprinting of Special Publication 1, *The Geology of Pennsylvania*, copublished by the Survey and the Pittsburgh Geological Society. When it was first printed in 1999, the book quickly became one of the Survey's all-time best sellers, and the edition sold out in less than one year. Continuous demand for the publication has resulted in another collaboration between the Survey and the Society for a second printing. Within the 10 parts are 57 chapters, authored by 90 individuals from academia, government, and industry. The two-color book contains more than 800 illustrations, an extensive bibliography, a detailed index, and a 16-page section printed in full color.

INFORMATION ON ORDERING

Special Publication 1, *The Geology of Pennsylvania*, edited by Charles H. Shultz, may be purchased from the State Bookstore, Commonwealth Keystone Building, 400 North

Street, Harrisburg, PA 17120-0053, telephone 717-787-5109. The cost of the book is as follows:

If purchased over the counter at the Bookstore, \$23.50 plus \$1.41 sales tax.

If ordered through the mail, there are two cost options:

- (1) \$28.25 (plus \$1.44 state sales tax if sent to a Pennsylvania address), shipped by U.S. Postal Service Media rate, generally 3 to 10 days delivery time; or
- (2) \$32.00 (plus \$1.92 state sales tax if mailed to a Pennsylvania address), shipped by U.S. Postal Service Priority rate or by United Parcel Service, generally 1 to 5 days delivery time.

"Official State Soils" share the same level of distinction as official state flowers and birds.



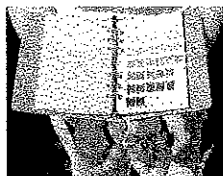
**Frontiers of Soil Science:
Technology and the Information Age
18th World Congress of Soil Science
July 9-15, 2006
Philadelphia, Pennsylvania**

<http://iuss.colostate.edu/18wcsc/>



***How can you help
support adoption
of the Hazleton
Soil as
Pennsylvania's
State Soil?***

PAPSS continues to promote legislative support to select, designate and adopt the **Hazleton soil series** as the official soil of the Commonwealth of Pennsylvania.



1. Visit, telephone or otherwise contact your local House Representative (the following web site has information on your state representative):

<http://www.house.state.pa.us/>

2. Request that they support the State Soil Bill being introduced by Representative Jim Lynch in 2003 by becoming a co-sponsor.

3. Ask your representative to contact Hon. Jim Lynch:

Hon. Jim Lynch
231 Pennsylvania Avenue West
Warren, PA, 16365
17120-2020
(814) 723-5203
Fax: (814) 728-3564

(at the Capitol)
162A East Wing
Harrisburg, PA
(717) 787-1367
Fax: (717) 787-0860

A state soil is represented by a soil series that has special significance to a particular state. Each state in the United States has selected a state soil, fifteen of which have been legislatively established. These

Submissions for the PENNSOIL-Pennsylvania Association of Professional Soil Scientists newsletter can be submitted at anytime by email to the editor: edgar.white4@verizon.net
Urgent Items for PAPSS member notification can be emailed to Nancy Sansoni: nsansoni@aol.com
Nancy can forward emails to all PAPSS members with email addresses.

Soil Quotes

"Essentially, all life depends upon the soil ... There can be no life without soil and no soil without life; they have evolved together." — **Charles E. Kellogg, *USDA Yearbook of Agriculture*, 1938**

"We are part of the earth and it is part of us ... What befalls the earth befalls all the sons of the earth." — **Chief Seattle, 1852**

"How can I stand on the ground every day and not feel its power? How can I live my life stepping on this stuff and not wonder at it?" — **William Bryant Logan, *Dirt-The Ecstatic Skin of the Earth***

"To be a successful farmer one must first know the nature of the soil." — **Xenophon, *Oeconomicus*, 400 B.C.**
"The nation that destroys its soil, destroys itself." — **Franklin Delano Roosevelt**

"For all things come from earth, and all things end by becoming earth." — **Xenophanes, 580 B.C.**

Mapping with the Aid of a Global Positioning System (GPS)

Karen Dudley, Soil Scientist, New Hampshire
From the Northeast Area e-News

MLRA Soil Survey Region 12—Winter 2003

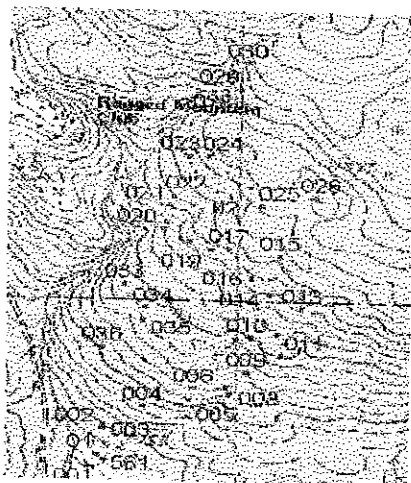
I was lucky enough to get my hands on a GPS unit (Garmin GPSmap 76) at the end of the last mapping season. What a wonderful and easy to use tool! It has made my life so much easier. Especially in locating myself way, way out in the woods. Yes, I'll admit that before the unit, I would sometimes have to go to the same spot from a different direction to make sure that I had been where I thought I was the hike before. I'll also admit that using a GPS could potentially save up to a couple of hours a day in mapping (but don't tell my State Soil Scientist - my acreage goals may be raised!).

I am impressed that even out in the woods I have satellite coverage on most days. Sometimes the unit will beep telling me that it has lost reception but then it will locate itself again within minutes. Since I have had the unit, I have changed my ways of walking in the woods both physically and logically. I walk with my right hand draped through the sharp shooter handle with the unit being held by that same hand (aimed at the skies). It is a good thing that I wear eye protection because as I am walking I like to look at the GPS to monitor how fast I am meandering through the woods (1.8 to 2.8 mph comes up a lot) and as you all know, branches can be very unforgiving. The unit is about twice the size of a cell phone, a little flatter and the front top of the unit has to be facing the skies. Preferably the southern sky because that is where most satellites are located.

It took me a few days to realize (with out reading the book—of course) that the compass portion of the unit works only when it is moving. So, if I stood still trying to get a bearing, the digital compass just didn't move. But when I started trucking in the right direction (after using my real compass), I noticed that the compass would change to the right bearing, of course.

This makes sense because the compass reading is calculated from the locations of the GPS unit as it moves via the satellites. If the GPS is not moving, I receive the lat.-long, but a bearing can't be calculated until more than one point is picked up. Isn't triangulation great?

The best part about the whole GPS thing is that you can pin point a hole that you dug - or a spot symbol for that matter (depending on the accuracy of the satellites at the moment - I'll take +/- 15' any day)! A point is entered just by holding down the "enter" button; a "waypoint" button and the points location is recorded into the unit. A nice friendly "beep" lets you know that the point is really in there. I record my daily treks by date and start with waypoint #1 every day. More important pedons and transects can be better located with the



"backpack" unit that can bring the accuracy down to 1 meter in location (elevation is still questionable). I have a feeling that I may become an expert on the use of the backpack this upcoming field season. Pedons, pedons, pedons!

Logically, I have noticed that I can easily become a little lazy; not paying attention closely enough to where I am (because it will print out later in the office) and I tend to look at smaller areas because they can be picked up by the GPS. I find myself "just adding that little area" to my mapping. As you can tell by Figure 1, I can take too many notes. My notes end up either in a field book or just a note on the topo sheet depending on the map unit.

Back at the office, I download the data from the GPS unit into Arc View and I can see the waypoints on either the topoquad or the orthophotoquad - depending on my preference. What an awesome way to map—not having to worry about being EXACTLY where you think you are—because it is being stored into the GPS.

The Pennsylvania Envirothon

Will be May 19^{and} 20 at the Penn State Mont Alto Campus near Gettysburg, PA. Last year 49 teams, 42 from the U.S.

and seven from Canada, competed in the Canon Envirothon, North America's largest high school environmental competition. Organized through the National Association of



Conservation Districts, the Canon Envirothon is the final competition in a series of contests beginning each spring that involves more than 500,000 teenagers throughout North America. In written and field tests, as well as oral presentations, five member teams from schools or organizations compete in these preliminary rounds for the distinction of representing their state or province at the Canon Envirothon. Key knowledge areas include: soils, forestry, wildlife, aquatics and a current issue, which changes from year to year.

<http://www.envirothonpa.org/soils.htm>

Sponsors

Pennsylvania's Sixty-Six Conservation Districts
Pennsylvania Association of Conservation Districts
Pennsylvania's State Conservation Commission

Partners

Pennsylvania Department of Conservation and Natural Resources
Pennsylvania Department of Environmental Protection
Pennsylvania Fish and Boat Commission
Pennsylvania Game Commission
USDA Natural Resources Conservation Service

The Sixteenth Annual Canon Envirothon Championship in the Summer of 200# will be held at Mount St. Mary's College in Emmitsburg, Frederick County, Maryland. This will be second time Maryland has hosted the event, the first being in 1992.

EDITORS NOTE: Volunteer to help a local school team prepare for the Envirothon Contest this year.