

# Ohio Pedologist

[www.ohiopedologist.org](http://www.ohiopedologist.org)

## Dear Members,

Well, another fine summer is just about finished, and I have many new scars to remember it by, some physical, but mostly mental.

The AOP has been busy working towards making soil science a thriving, respected profession in the state of Ohio. On June 20th the Executive Council and Certification Board met with a group from Indiana that was actively involved with establishing a state registry of professional soil scientists. Also in attendance was Luther Smith of the SSSA Certification Program who discussed other options to state licensing which may be just as strong.

Listening to Indiana's progression toward state registration was rather inspiring but, unfortunately there was too much luck involved. Also, their registration does not appear to have the teeth involved to discipline unqualified individuals practicing soil science.

Luther Smith suggested a more slow approach by adopting the State Based approach to the 'ARCPACS' Certification Program. This approach is described in more detail on page three. As you can see, most of the work has already been completed by SSSA for us. There is very little development of new rules, regulations, and bylaws. We simply adopt

SSSA bylaws and requirements.

The benefits of this will be numerous.

First, we will add more certified members to the certification program by adding the individuals that are currently 'ARCPACS' Certified but not AOP Certified.

Second, we will have the opportunity to add many new certified members. Currently, only individuals trained in pedology are AOP Certified, hence the 'P' in AOP. With the State Based Program we will be able to accept anyone that has the courses and experience to become Certified. This means Soil Fertility Specialist, Turf Specialists, Soil Physicists, Soil Chemists, Microbiologist, etc., can all become certified, if they meet the requirements. The biggest concern is that these individuals may start practicing Pedology. Fortunately the Code of Ethics states in Article II-2. that *A Registrant shall not give professional opinion or make a recommendation without being as thoroughly informed as might reasonably be expected considering the purpose of which the opinion or recommendation is desired; and the degree of completeness of information upon which it is based should be made clear.*

An example of this is the Professional Engineer. How many Civil Engineers are working as Electrical Engineers? They took different courses and received dif-

## Inside this issue:

Association News	2
State Cert. Prop.	3
Workshop	4
SWCD Comments	6

## 2006 Directory of Officers

Tom Zimmerman, President
Matt Deaton, President-elect
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Dan Benyei, Secretary
Jim Svoboda, Treasurer
Steve Miller, Newsletter editor
Tom Nash, Academic Rep.
Rick Griffin, Federal Rep.
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# ASSOCIATION NEWS

ferent training. The same is the case for all the separate disciplines within Soil Science. If one chooses to practice in a field they are not formally trained in then the Certification Board can discipline the Registrant or revoke the Registration.

Third. Power in numbers. We have to recognize that we are a small profession and always will be. If we unite with the other soil science disciplines we have a greater chance of been heard and a greater ability to gain State Licensing.

Fourth, we will remove the 'Old Boys Club' mentality of the Certification Board. Everyone know everyone in this profession so when outsiders are encountered they are scrutinized much more thoroughly than one of the 'Boys'. With adding two outside interests to the Board there will be an oversight we have never had before. Preferably both would be from State Government and one would be an Engineer and one would be a Registered Sanitarian.

Fifth, the ability to add members from other states. The soil science profession is thriving in Pennsylvania and Indiana. By allowing the current out of state 'ARCPACS' Certified the ability to become certified in Ohio will increase our numbers. Also, through reciprocity, Ohio Certified Soil Scientist will easily be able to work in Pennsylvania and Indiana without going through any additional certification process.

If you noticed, I keep repeating that we need more certified individuals. I have come to the realization that our organization is aging at that things must be repeated to make a statement... HeadOn... Apply Directly to the Fore...

## State Licensing Fund

A fund to help establish a state licensed soil science program has been established. As many of you are aware this could cost approximately \$20,000. Remember donations are welcomed anytime and are always tax deductible. Send donations to:

Jim Svoboda, AOP Treasurer  
520 West Main Street, Suite 3  
Cortland, Ohio 44410

The road to State Licensing will be difficult. By structuring our current certification program similar to what Luther Smith had proposed we will be a stronger body, much more capable to succeed in this battle.

Washington State recently adopted a certification program similar to the one describe and then pushed for State Licensing. The Bill passed both the House and Senate to be recently vetoed by the Governor.

Even though that can be a depressing story, at least they made it that far. Unfortunately with government nothing every goes through the first time.

Thanks for your time and serious consideration on this matter. The Executive Council feels that this should be adopted as soon as possible. We will have a vote on the Saturday October 3rd during our business meeting to decide which direction to proceed.

The current certification bylaws are lacking and vague and are cause too much consternation among board members when approving members. To make these volunteers' decisions easier we must proceed.

Tom Zimmerman

## EVENTS

**September 15**—Indiana Association of Professional Soil Classifiers— Potato Creek State Park

**November 3-4**-AOP Fall Workshop-Hueston Woods State Park

**January 25**-AOP Winter Meeting

## SMITHSONIAN EXHIBIT

Jeff Glanville and Rich Gehring are tirelessly working towards acquiring funding for the exhibit

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# Proposal for State Based Soil Science Certification

Submitted to the June 20th joint Executive Council and Certification Board meeting by Luther Smith, SSSA.

1. Soil Science Society of America (SSSA) would still be the administering organization.
2. The National Certified Professional Soil Scientist/Classifier (CPSS/C) Board would be responsible for overall program policy and structure. This Board already exists but it also does all of the certifying of individuals. The national components would help keep consistency and uniform standards between states. They would also work with the Council of Soil Science Examiners (CSSE) in maintaining the appropriate exam standards and administration of the exams.
3. There would be a state CPSS/C Board that would administer the existing CPSS/C programs and would be responsible for certifying individuals but not for overall policy of the program. They would enforce the policies of the program. The state certifying board would consist of seven members:
  - Five or six would be practicing Certified Professional Soil Scientists and/or Classifiers
  - One or two would be representatives of the state departments of government responsible for licensing/certification issues, water quality and natural resources and sanitary and environmental issues
  - Board members would be volunteers and elected or appointed
4. All credential and continuing education records would be maintained by SSSA. They would be made available to the appropriate state government office via the internet to verify certified professionals.
5. Administrative fees would be invoiced and paid to SSSA. The current certification renewal fee is \$40.00/year. (\$50.00 in 2007)
6. State Department of Environmental Protection or Health or the appropriate state agency would endorse or recognize as appropriate the CPSS/C as the credential for professional soil science work as defined.
7. Option step: The state and national certifying boards could both review applications before certification is granted. Both groups would have to agree to grant certification. Only one certificate would be issued.

## Let's Do Ourselves a Favor

After hearing from numerous, well respected soil scientists that Ohio does **not** have enough soil scientists to fulfill the demand that requiring soil scientists for household sewage on-site investigation will create, I had to crunch the numbers. There are approximately 20,000 septic systems permitted each year, averaging 228 per county. A full time soil scientist working 50 weeks per year can complete 3 investigations per day, 15 per week, or 750 per year. Dividing 20,000 septic systems per year by 750 equals 27 soil scientists. Our current Consultant List has 24 soil scientists. Of course many will argue that these soil scientists are not full-time.

Then let's take it a step further. If we look at the neighboring states' consultants list it is determined that the PA Association of Professional Soil Scientists have 5 consultants close to Ohio, WV Association of Professional Soil Scientists has 1, and the Indiana Registry of Professional Soil Scientists have 6. So 27 from Ohio plus 12 from neighboring states equals **39 Consulting Soil Scientists**.  $20,000/39 = 512$  soil investigation per Consultant per year. That's a part time job. In my previous job I was expected to do 20 detailed soil evaluations per day.

With the imminent change in administration within the state whose to say there won't be nine more full time soil scientists looking for work. All it takes is a stroke of a pen. Of course there will be the Dan Michaels and Jim Bauders that hire young and bright recently graduated soil judges. It doesn't take long to become more efficient by using technology and extra man-power, but this is only when the demand supports it.

Unfortunately I see many of our soil scientists looking at this backwards. One thing I took away from Economics 101 was supply and demand. If there is a demand the soil scientists will come. The University is never going get more students if the job market is not there. We don't need the University to ramp up a huge program either. If all we need is 30 to 40 full-time soil scientist to complete this work the University will only need to graduate one soil scientist per year or less (probably less because most soil scientists work more than 50 years, if they don't get the axe first).

It is up to the Associations members to create a demand for soil scientists in Ohio by promoting soils, working together, and speaking as one common voice.

Ohio's least respected soil scientist,  
Steve Miller, B.S., M.S., AOP-CSS, CPSSc.

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## Change in Plans for 2006.

For the past several years, AOP has had two major events throughout the year in the Annual Banquet, and Summer Picnic. After canceling the summer picnic the last few years due to lack of interest, it was decided this year to try something a little different. The summer picnic as we have all grown to know isn't being planned at all this year, as planning efforts have gone in a different direction. In the year 2006, AOP is excited to roll out the first annual, AOP Fall Soils Extravaganza. This year's event will be held on November 3<sup>rd</sup> and 4<sup>th</sup> in Southwestern Ohio (Hueston Woods Resort and Conference Center), and will offer a wide variety of sessions ranging from field training to social gathering. The following is a TENTATIVE agenda for the 2006 Fall Soils Extravaganza.

### **Friday November 3<sup>rd</sup> 2006** (Beverages will be available throughout the session, possible a Portajon)

- 12:00 pm - Brief introduction to new statewide soil evaluation form for on-site septic
- 12:30 pm - Known texture samples. Ten samples - enter estimates on form and turn in for lab analyses key.
- 1:15 pm - Pit one - Describe pit together as group using new form
- 2:00 pm - Split into two groups. Group A goes to pit 2 and group B to pit 3. Describe pit individually using new form.
- 3:00 pm Rotate groups
- 4:00 pm Discussion about pits, form, known textures, loading rates, septic system size, horizontal and vertical separation distances.
- 5:00 pm - Depart the field site and travel to accommodations
- 6:15 pm Supper on your own. Grills will be fired at the hospitality cabin with complimentary beverages. Must provide your own meat for grilling and small side dish. Numerous restaurants are close by for an alternative.
- 7:00 pm - Social gathering at Hueston Woods State Park (Preble/Butler County Ohio)

### **Saturday November 4<sup>th</sup> 2006**

- 7:00 am - Breakfast at Hueston Woods Resort and Conference Center
- 8:00 am - Review of State Form. Discussions on improvements, inadequacies and/or liabilities.
- 8:30 am - Review of horizontal and vertical separation distances.
- 8:45 am - Type of systems suitable for sites depending on site conditions. Use Friday's sites as examples.
- 9:15 am - Tyler's Table - How it works. Sizing the system using Tyler's Table, site condition needed
- 9:45 am - Implications of new rules and demand for soil scientists.
- 10:00 am - Refreshment Break
- 10:15 am - Begin AOP business meeting. Focus on Certification and ARCPACS affiliation. **Vote on New Certification Rules and Regulations.** (An absentee ballot will be mailed one month prior to vote).
- 12:00 am - Adjourn

Registration for the event will be \$50.00, and will cover breakfast, and refreshments for the social gathering.

Twenty eight double occupancy rooms have been reserved at the lodge, for a special group rate of \$105.00 per night, and 2 cottages have been reserved at a special group rate of \$169.00 per night. The cost of the overnight stay will be the responsibility of those in attendance. There are also hotel accommodations in nearby Oxford Ohio if the state park isn't in your taste. Feel free to contact other members, and room together if you desire. You will be responsible for making official reservations with Hueston Woods, but we will still need to know your reservation plans, so that we can submit the list of members to Hueston Woods.

At the field training event, the plan is to have 2 to 4 open pits in Southwestern Ohio to give members the opportunity to 1) perform technical soil evaluations and compare them to others, and 2) see unique soils in different parts of the state. It is also expected that the field portion of this event, will give individuals seeking certification, the

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opportunity to demonstrate their competency in properly evaluating soils. We also plan to have on hand, a sample set with full characterization data to give members the opportunity to calibrate their fingers (texture wise) for upcoming field work.

The social event will be held at one of the cottages that will be rented by a few members. Also members can enjoy the great amenities of the lodge, and relax as they see fit.

On Saturday morning a breakfast buffet will be served at 7:00 am in our meeting room. Breakfast will last approximately 1 hour, with training beginning promptly at 8. Hopes are that we will concentrate on issues concerning HB 231, and its expected January 1<sup>st</sup> 2007 effective date.

A short business meeting will follow the training, to give members and committees a chance to propose new ideas, and potential changes in the bylaws in preparation for the upcoming annual banquet.

CEU's will be available pending approval by the certification board.

Registration information will be out as soon as all of the small details are worked out, (Saturday training, and CEU allowance), However, the deadline to get your reservations in for this event is September 15<sup>th</sup>.

We hope that this new event will be a nice change of pace for everyone, and will be highly attended. Additional information on Hueston Woods is available at <http://www.ohiodnr.com/parks/parks/huestonw.htm> , and <http://www.huestonwoodsresort.com/> .

If you have any questions or concerns please feel free to contact Matt Deaton by email at [matt.deaton@dnr.state.oh.us](mailto:matt.deaton@dnr.state.oh.us) or by phone at (937)-456-9559.

Hope to see everyone there.

## **FALL WORKSHOP REGISTRATION FORM, DUE OCTOBER 2**

**Friday and Saturday, November 3 and 4, 2006. Hueston Woods State Park**

Name \_\_\_\_\_

Lodging Location-(circle one): Park Lodge, Park Cabin, Other

Lodge or Cabin Mates: \_\_\_\_\_

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It is the responsibility of the attendee to schedule arrangements with room mates, make reservations with the Park, and pay for the lodging. Contact Hueston Woods @ 1.800.282.7275 to make reservations.

Please complete form and enclose the \$50 registration fee and send to:  
The Association of Ohio Pedologists  
c/o Jim Svoboda, AOP Treasurer  
520 West Man Street, Suite 3  
Cortland, OH 44410

**REGISTRATION MUST BE RECEIVED BY OCTOBER 2 TO MAINTAIN THE DISCOUNTED ROOM PRICE.**

**\*\*\*Donations above and beyond the \$50 registration fee will be applied to the State Licensing Fund which is currently close to \$500.**

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# Ohio Department of Health Adopting New Household Sewage

Submitted by Lee Carl Finley, RS, District Technician, Tuscarawas SWCD to the Ohio Federation of Soil and Water Conservation Districts' website.

## ***New Regulations***

For the past year, the Ohio Department of Health (ODH) has been in the process of adopting new household sewage treatment regulations. For years the household sewage program was the only ODH program that was without a specific governing statute. Further, the existing rules were adopted in 1977 and much has changed in the last 30 years. New technologies and treatment systems have been developed. Lastly, ODH wanted to address the legacy of discharging systems on small and challenging lots. There was a widespread conviction that many of these systems were contributing to the overall degradation of the waters of the state.

Thus, in June of 2003, Representative Tom Niehaus introduced HB 231 that required, in part, the adoption of new sewage treatment regulations. On February 1, 2005, Governor Taft signed this bill into law, this law becoming effective on May 6, 2005. In so signing, ODH had until May 6, 2006 to adopt new regulations to meet the provisions of this law.

For the past year, ODH worked with a Sewage Advisory Committee (SAC) to develop new regulations for household sewage systems. This committee was comprised of many individuals from various government agencies as well as individuals from both industry and concerned citizens. The Ohio Department of Natural Resources (ODNR) was represented by Division of Soil and Water soil scientist Tim Gerber on this committee. On March 23, 2006 the Public Health Council (PHC) voted to approve these new rules. Now these rules have been sent to the Joint Committee on Agency Rule Review (JCARR). The new rules are expected to be adopted by the PHC at its next meeting on May 4, 2006, with an effective date of January 1, 2007.

Many of you who are reading this may ask, "What do these new regulations have to do with me? Will these regulations even affect SWCDs?" And this is the question.

Initially, these rules will not *directly* affect SWCDs. No where within the pages of these rules are SWCDs mentioned. However, there are certain provisions of these rules that could drastically impact various departments. Further, many of the contractors with whom we work will be directly affected by these regulations. Thus, being aware of these changes can only help to increase our knowledge of what these contractors will have to go through. Lastly, new rules addressing field tile have been added to these rules.

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## ***Soils Evaluations***

Under these new rules, all new home sites will be required to have an on-site soils investigation. This will either have to be done by the local health department itself, or by some other "**qualified individual**". These new rules require the logging of the soils in the test holes using USDA terminology used for soil descriptions in soil survey investigations. Each log will be required to have a record of soil colors (using the Munsell Soil Color System), and soil texture (including clay and rock fragment, in percent), structure (including grade, size and shape), and consistence for each horizon, using terminology in the USDA/NRCS Field Book for Describing and Sampling Soils.

The soil evaluator will also be required to identify any limiting layers within the soil. Accurate soil descriptions are critical for the design of wastewater systems appropriate for soil conditions in the treatment area.

At present, there is question and debate at the local health department level as to who can and should do these evaluations. Some health departments may opt to have a private consulting soil scientist look at every new home site. A number of counties in NE Ohio are already doing this. But due to the limited number of soil scientists in other parts of the state, this may not be a viable option elsewhere in the short term.

Some local health departments have been very proactive and have been doing detailed soils evaluations, but only a number of sanitarians have spent enough time with an experienced soil scientist, reviewing their observations, to develop reliable soil evaluations skills. In working with ODH, ODNR soil scientists, in cooperation with SWCDs, have offered training over the past five years to help local health department staff know how to interpret soil descriptions prepared by soil scientists. However, more detailed training is needed to prepare sanitarians in conducting evaluations accurate enough to serve as a basis for wastewater system design. And this training will take time. Thus, it is possible that a local health department may ask assistance with such evaluations until such time as the health department staff become comfortable with such evaluations.

Recently, Coshocton SWCD sponsored a contractor's workshop, along with Holmes SWCD and Tuscarawas SWCD. During discussion in that meeting, it was mentioned that one of the local health departments has already approached an SWCD about doing these evaluations. It is likely that other local health departments will ask assistance with soil evaluations from SWCDs until such time as the health department staff become competent to do their own evaluations. Tim Gerber made the following observation in a recent edition of "Newspoints" (November 2005):

*Since health departments currently issue permits for about 20, 000 new or replacement systems annually, this will create a large demand for individuals capable of accurately describing these soil characteristics at home sites.*

The Division of Soil and Water Conservation can offer advice or options to SWCDs interested in providing soils evaluations for their local health departments to use in the design and approval of wastewater systems.

*Contractor Requirements (section removed due to pertinence of information)*

The new sewage regulations will seriously impact local contractors, many of whom also are involved in conservation work. Under these new regulations, contractors now have to:

- pay a local registration fee in each of the counties in which they install systems,
- pass a state-mandated test,
- post a \$25,000 surety bond,
- demonstrate professional competency through one of the following:
  - by becoming an Ohio On-site Wastewater Assn (OOWA) Installation Qualified (IQ) contractor,
  - by becoming a Certified Installer through the National Environmental Health Assn (NEHA),
  - by attending 6 hrs of related continuing education,
- proof of competency for the sewage components that he installs,
- contractor shall warrant that each system that he installs has been installed in compliance with all applicable rules and design specs
- produce an as-built record of each system installed, including:
  - horizontal/vertical benchmarks,
  - a Plan view drawing (to scale) with elevations
  - profile drawings,
  - any additional information that is required
- provide literature to the owner of the system regarding the proper functioning of the system.

Special thanks to Jean Caudill, Ohio Department of Health, and Tim Gerber, Ohio Department of Natural Resources, for taking the time to review the contents of and to contribute comments for this article.

### **NINTH EDITION OF THE KEYS TO SOIL TAXONOMY AVAILABLE**

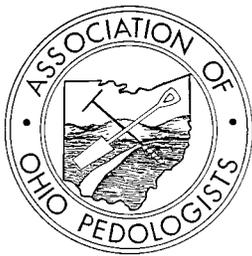
The keys can be view at: [http://soils.usda.gov/technical/classification/tax\\_keys/](http://soils.usda.gov/technical/classification/tax_keys/)

Or they can be ordered by following one of the following steps.

1. Order on-line: Go to <http://www.nrcs.usda.gov/>, select "Publications" on the left Quick Access list which will take you to the Publications ordering page.
2. Order by phone: 1-888-LANDCARE (follow recoded message instructions)
3. Order by FAX: (515) 289-4561 (Ask for "Keys to Soil Taxonomy". Provide your name, institution, complete shipping address and a phone number)
4. Order by mail at: Landcare, USDA-NRCS, 5140 Park Ave. Building 6 Suite C, Des Moines, IA 50321

## Ohio Pedologist

The Ohio State University  
School of Natural Resources



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