



Illinois Soil Classifiers Association Newsletter

Winter-February 2008

Upcoming Events:

33rd Annual ISCA Meeting 13

54th Midwest Friends of the Pleistocene Field Conference 17

2008 Annual NSCSS Conference 17

Inside this issue:

Membership News 2

Trading Post 2

2007 Budget 3

Funds from Central States Forest Soils Workshop 4

Burt Ray Award 4

Dues Increase?? 5

ISCA Comments on Private Sewage Disposal Code 6-11

Constitution Revision Notice 11

By-Laws Revision Notice 12

Map & Directions to Annual 14

2008 Bent Auger Award 14

Candidate biographies/ '08 Election ballots 15-16

Message from the President

In this, my last message to you, you will not find references to carpentry skills, baseball gloves, or black holes! That's because,

(1) We now have a multi-year plan thanks to many of you who participated in our early planning session. I want to thank all those who helped develop items for this plan, including Mark Bramstedt and the Public Relations & Education Committee, who put the multi-year plan together into a product we can all use. This plan should allow for greater continuity of specific educational events that are "under construction" for the incoming ISCA council members and president to follow.

(2) The ISCA will have a proposal out for a different way to conduct the nomination of officers every year. I'm hoping everyone will see the potential benefit this will make as we seek qualified candidates every year, and doing so by making everyone a winner. Each of us has talents and skills to make this organization run as smooth as "leather". We should not waste any of our resources, namely, you the member.

(3) The "ILICA Incident" made us more aware of the IDPH's proposed code changes for Private Sewage Disposal which is perhaps, the most single important issue facing ISCA at the moment. In response, ISCA has submitted a well written statement(s) of our position which has incorporated many comments we received from our membership. Where this will all end up is mostly a guess. We shall certainly see in the near future.

In the meantime, ISCA must move forward and continue to do what we do best....providing educational opportunities to our membership so that we can become better at doing "soil business".

I want to take this last opportunity to thank all those who have served with me this year, and in doing so, have provided me with much needed support. I know you will help me in doing the same for our new incoming ISCA President, Scott Wegman.

Ken Gotsch, President
217-774-5564
Ken.gotsch@il.usda.gov

Illinois State Soil T-Shirts Still Available

Short Sleeve -- \$12

Long Sleeve -- \$14

Shipping and Handling \$5 per order

Order by contacting Steve Elmer

E-mail : torflagr@geneseo.net



ISCA Membership News

Obituary - Donald Wallace



Donald L. Wallace, age 85, of Edwardsville, died at 11:51 p.m. on Monday, Dec. 24, 2007, at Anderson Hospital in Maryville.

He was born on May 16, 1922, in White County, the son of the late Oscar and Esther (Doty) Wallace.

He married Doris E. Potter on March 23, 1945. She preceded him in death on Aug. 5, 1982.

He married Edna Erlich in July, 1985. She preceded him in death on June 25, 2003.

He is survived by two sons: Donald R. Wallace and his wife, Linda of Belleville, and James P. Wallace and his wife, Barbara of St. Louis; a step daughter: Joann Diepholz and her husband, Roger of Glen Carbon; four grandchildren: Christopher, Todd, Ryan and Baily Wallace; and five step grandchildren: Gina Hall, Jayne Gratz, Nathan and Toby Meador and Heather Meyer; and one sister: Violet Jones and her husband, Victor of Carmi.

Mr. Wallace was a retired soil scientist for the Department of Agriculture and a visiting professor at Southern Illinois University Edwardsville. He also worked for SWMPC and served on the Planning Commission for the city of Edwardsville.

He was a member of the Salem Primitive Baptist Church in Crossville and the Edwardsville Kiwanis Club. He graduated Michigan State University in 1944 and earned a Master's Degree from SIUE in 1970.

Visitation was from 4 p.m. to 8 p.m. on Thursday, Dec. 27, at Weber and Rodney Funeral Home in Edwardsville.

Funeral services were at 9:30 a.m. on Friday, Dec. 28, at the funeral home, with Rev. Nathan Meador officiating.

Interment was at Little Wabash Cemetery in Crossville.

Memorials are suggested to the Kiwanis Club of Edwardsville.

Published in the Edwardsville Intelligencer from 12/26/2007 - 12/27/2007.

TRADING POST

This spot is reserved for members who would like to buy, sell, trade, or announce an item, event, or activity in our newsletter. Please limit your classified ad to 25 words or less. Email your ad to the newsletter at zach.weber@il.usda.gov

- ISCA ball caps available for \$9 (includes S&H). Contact Steve Elmer at torflagr@geneseo.net
- Drummer T-Shirts available in 2 colors (see front cover). Short sleeve - \$12 Long sleeve - \$14
- 2000 4100 4WD JD hydrostatic drive, low hours, with Giddings rear-mounted 5-TS soil probe, storage boxes, and many accessories. Call A&E Soil Consultants@ 309-945-9090.



ISCA 2007 Budget

	Budget	Actual
Income		
Annual / Fall Meetings	\$800.00	\$560.00
Dues, Membership	\$2,000.00	\$3,225.00
Dues, Certification & App. For Cert.	\$1,200.00	\$1,340.00
Interest	\$80.00	\$80.00
Bookmarks	\$0.00	\$11.00
Hats	\$25.00	\$0.00
Shirts	\$50.00	\$57.00
Soil Tubes (Drummer)	\$25.00	\$25.00
Workshops	\$1,500.00	\$0.00
Soil Survey Horizon (refund)	\$0.00	\$95.00
TOTALS	\$5,680.00	\$5,393
Expenses		
Administration	\$400.00	\$409.00
ISCA Magnets	\$0.00	\$871.00
ISCA Brochures	\$0.00	\$738.00
Soil Cards and Drummer bookmarks	\$0.00	\$1,534.00
Annual / Fall Meetings	\$1,200.00	\$1,516.00
Certification Board	\$100.00	\$0.00
Awards (Burt Ray)	\$400.00	\$500.00
Central States Forest Soils Workshop	\$500.00	\$500.00
Farm Progress Show	\$500.00	\$406.00
Miscellaneous	\$100.00	\$95.00
Public Relations	\$200.00	\$0.00
Smithsonian Soils Exhibit	\$1,700.00	\$700.00
Soil Judging (Regional Collegiate)	\$500.00	\$400.00
Soil Survey Horizons	\$1,600.00	\$1,520.00
Workshops	\$1,000.00	\$0.00
TOTALS	\$8,200.00	\$9,189.00

ISCA served as agent for 2007 Central States Forest Soils Workshop

	Amount
INCOME	
Transfer from Missouri	\$4,677.32
ISCA Contribution (Lab analysis)	\$500.00
Other (Registrations)	\$11,665.00
TOTAL	\$16,842.32
EXPENSES	\$13,484.93
DIFFERENCE	\$3,357.39
	Sent to Ohio for 2008



2007 Burton W. Ray Scholarship Award in Soil Science

The 2007 winner of the scholarship is Jenwei Tsai from the University of Illinois. The contest was held near Marshall, Illinois this last October. Jenwei was the overall individual winner of the Region 3 contest and her name was submitted by Robert Darmody, UI team advisor, as the award recipient. Ms. Tsai's name has been engraved on the award as the 2007 winner. Olivia Dorothy was the 2006 award winner, who was also from the University of Illinois. The award plaque resides in Turner Hall at the University of Illinois, where Professor Ray was an instructor.



Dues Increase??

For the past year, the Council has been discussing a possible dues increase for Full and Associate Membership within ISCA. The reason is, of course, to increase our revenue and operating capital and to prepare for anticipated expenses in the future. The Long Range Plan for ISCA indicates the possibility of future training sessions, seminars, and other activities that will require working capital to initiate. **Of the current \$25 fee, ISCA actually ends up with only about \$6.** The other \$19 goes toward an annual subscription to Soil Survey Horizons. We have checked with the editors and SSH is not on the web and is not scheduled to be in the future. They feel they have a limited audience of only about 1,700 total subscribers and they can't afford to keep a staff if they could not collect a subscription fee. The cost per subscription has gone up three times in the last four years!

The possible dues increase would only be \$5 or \$10 per year. With roughly 100 Full and Associate Members, obviously the increased revenue would be \$500 or \$1000 per year. We have not had a dues increase in a number of years. In fact, the Council could not come up with the last time without having to go back through the records.

Couple suggestions on what we might do: One is to leave everything the way it currently is and get by the best we can. Two, would be to go with an increase, either amount, and be better able to handle increased expenses in the future. Three, drop the Soil Survey Horizon subscription as part of the dues and let folks handle that on their own through SSSA. Fourth, might be to go ahead with an increase in dues but then offer upcoming seminars or workshops free or at a much reduced rate to members as part of a member incentive program.

We are not preparing a specific proposal for the upcoming annual meeting but we will be discussing this point for future guidance. Be prepared!

- submitted by Roger Windhorn

**Comments from the Illinois Soil Classifiers Association (ISCA)
Concerning the Proposed Amendments to the Private Sewage Disposal Code
Illinois Register Volume 31, Issue 47, November 26, 2007, pages 15642 through 15742
December 31, 2007**

Code Citation: 77 Ill. Adm. Code 905

Section 905.10 Definitions, page 15650
“Estimated Seasonal High Water Table”

Comment: The proposed definition allows for a subjective determination of the seasonal high water table. The Illinois Soil Classifiers Association proposes the use of measurable soil characteristics as the best objective method for determining the estimated seasonal high water table. These measurable soil characteristics, called redoximorphic features (formerly called mottles), only develop in the areas of the soil that have been saturated on a regular basis for an extended period of time. The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), the International Committee on Soils with Aquic Soil Moisture Regimes (ICOMAQ), the National Technical Committee on Hydric Soils (NTCHS) and the soil science community at large have long recognized redoximorphic features as the most reliable method for determining the depth to a seasonal high water table. The NTCHS includes soil scientists in the NRCS in cooperation with the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, and various regional, state, and local agencies across the United States. Redoximorphic features are recognized in other state septic ordinances as the most reliable way to determine the estimated seasonal high water table. The NRCS has established accepted scientific methods and procedures for describing these features and characteristics in the Field Book for Describing and Sampling Soils. These methods are also recognized by the Soil Science Society of America, universities, and other soil science associations as the most objective method to determine the depth to the estimated seasonal high water table.

Using direct observation of a seasonal high water table during any time of the year will provide an inaccurate estimation of the depth because the water table fluctuates on an irregular, unpredictable basis determined by precipitation at the site and in the region of the site. The seasonal high water table fluctuates on an annual, seasonal, monthly, weekly, daily, and sometimes hourly basis depending upon the soil and other environmental factors. The only time when using direct observation would provide a more accurate determination of the seasonal high water table would be if monitoring wells were installed at a site and the depth was recorded over a period of several years.

Using published soil survey information alone to make a determination of seasonal high water table and landscape conditions may provide an inaccurate estimation of the seasonal high water table and site conditions since the soil surveys were not designed for site specific interpretations.

Recommendation: The Illinois Soil Classifiers Association recommends that the definition of the estimated seasonal high water table be strengthened, so that measurable soil characteristics (redoximorphic features) which are recognized by the scientific community as identifiers of soil saturation and which are described by accepted procedures, be used as the major identifier to determine the depth to saturation and that other features of the soil and landscape may be used as additional support. These accepted procedures also provide a method for the interpretation of whether soil features are relic or contemporaneous to the current existing environment. If there is a preponderance of evidence that the soil features are not reflecting current conditions, then that information may be submitted to refute the depth of seasonal saturation determined by using the soil features alone.

Section 905.15 Incorporated and Referenced Materials, page 15652

Section 905.15 a)

Comment: The only reference given for soils is a glossary of terminology. There is no reference to the standard, method, or procedure for which the soils should be described. The Field Book for Describing and Sampling Soils ver. 2.0 was developed by soil scientists in the U.S. Department of Agriculture in consultation with soil scientists across the United States from various government agencies and universities. It is considered the national standard for describing soil properties and characteristics. Two other references that are standard to soil science for describing and classifying soil

are: [Soil Taxonomy](#) and the [Soil Survey Manual](#).

Recommendation: The Illinois Soil Classifiers Association recommends that the following publications be cited in the Code and referenced in Section 905.55 a) 1) and that they be used as the standards for observing and recording soil and site characteristics:

Schoeneberger, P.J., Wysocki, D.A., Benham, E.C., and Broderson, W.D. (editors) 2002. [Field book for describing and sampling soils, version 2.0](#). Natural Resources Conservation Service, USDA, National Soil Survey Center, Lincoln, NE.

Soil Survey Staff. 1999. [Soil Taxonomy: A basic system of soil classification for making and interpreting soil surveys](#). 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Division Staff. 1993. [Soil Survey Manual](#). Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Section 905.55 Subsurface Seepage System Design Requirements, page I5676

Section 905.55 a) 1)

Comment: There is no standard method or procedure suggested or required for describing soil properties and characteristics. The [Field Book for Describing and Sampling Soils ver. 2.0](#) was developed by soil scientists in the U.S. Department of Agriculture in consultation with soil scientists across the United States from various government agencies and universities. It is considered the national standard for describing soil properties and characteristics. Two other references that are standard to soil science for describing and classifying soil are: [Soil Taxonomy](#) and the [Soil Survey Manual](#).

Recommendation: The Illinois Soil Classifiers Association recommends that the [Field Book for Describing and Sampling Soils](#), [Soil Taxonomy](#), and the [Soil Survey Manual](#) be used as the standards for observing and recording soil and site characteristics and that this is so stated in this paragraph.

Section 905.55 a) 2) C), page I5677

Comment: In the late 1970's the Illinois Soil Classifiers Association pursued licensure of soil classifiers in the State of Illinois. Near that same time, the geologists in Illinois were attempting to become licensed, and they were very concerned that soil classifiers would conflict with their area of expertise. After much discussion, it was informally agreed between the geologists and the soil classifiers that Soil Classifiers would pursue certification and not pursue licensure and would classify soils as defined in Section I of the ISCA Constitution as follows:
 “ ‘Soil Classifier’ shall mean a person who by reason of special knowledge of the physical, chemical, and biological sciences applicable to soils and the methods and principles of soil classification as acquired by soils education and soil classification experience in the formation, morphology, description, and mapping of soils is qualified to practice soil classifying”.

ISCA removed their objection to the licensure of geologists when it was informally agreed that the geologist would deal with other near-surface materials, including hard rock and unconsolidated materials that are below the soil profile. It was also agreed by the geologists, the soil scientists, and the State of Illinois that the arbitrary depth of soil would be five feet, or to the bottom of the developed part of the soil. Geologists would describe and classify the material below this depth and soil classifiers would describe the active soil at the surface.

Geology is a study of the rocks and minerals below the earth's surface and does not generally include the interpretation of the soil. In addition, the official job description of a Licensed Professional Geologist for the State of Illinois includes only those investigations that deal with the geology of the earth's surface, not with private sewage disposal.

According to these definitions and to the prior agreement between soil classifiers and geologists, the Illinois Soil Classifiers Association rejects the addition of Licensed Professional Geologists as a person qualified to conduct soil investigations.

Recommendation: ISCA recommends that item C) be deleted.

Section 905.55 a) 2) D) and E), page 15677

Comment: The minimum requirements to become an ISCA Certified Professional Soil Classifier (CPSC) are a BS degree in a natural science field (which includes at least 15 semester hours of soil science), 4 years experience in classifying soils under the supervision of a CPSC, and the passage of a written exam. ISCA believes that employees of health departments with no college degree, only 3 years experience (not actually in classifying soils), and only 6 semester hours of soils course work do not have the training nor the experience to accurately describe soil properties according to established procedures. In addition, these employees have even less credentials to supervise other health department employees in soil classifying.

Recommendation: ISCA recommends that both proposed items D) and E) be deleted.

Section 905.55 a) 3), page 15678

Comment: No state agency has the authority to require a federal agency to provide additional information, especially if there is no official cooperative agreement. Also, listing NRCS may cause an apparent or perceived conflict of interest for NRCS soil classifiers who do soils consulting on the side, especially since it says that NRCS will help in conflict resolution. If the wording remains as proposed, NRCS soil classifiers would no longer be able to practice soil classification for private sewage disposal. This would negatively impact the number of soil classifiers who are available for consulting.

Recommendation: ISCA suggests changing the wording of this paragraph to: *“If conflicting soil information is provided about a given site, a third Certified Professional Soil Classifier will be required to provide additional information or help to resolve the conflict. An NRCS soil scientist, who is also a Certified Professional Soil Classifier, may be contacted for technical information and interpretation.”*

Section 905.60 Subsurface Seepage System Construction Requirements

Section 905.60 a) 1), page 15679

Comment: To design a system based upon the permeability of the soil above the seasonal water table will not necessarily provide a design that is best suited for that soil. The estimated seasonal high water table has no effect on the permeability of the soil horizon nor the loading rate of the soil. The layers above the seasonal high water table may be more permeable than the layer below the water table that is in the zone of the soil needed to treat the effluent. A design based upon the layer above the seasonal water table may not be adequate to treat the effluent. For example, a soil may have a seasonal high water table (limiting layer) at 24 inches, but have a more slowly permeable layer starting at 30 inches. The proposed code calls for the design to be based upon the soil above the seasonal water table. However, if perimeter drains were allowed to lower the water table, then the layer at 30 inches would impact the movement of effluent more than the soil above 24 inches.

Also, the least permeable layer above the seasonal water table may occur well below the minimum separation distance or the distance needed to treat the effluent. To design a system based upon a layer that is below the treatment distance may require an unnecessary design. For example, if the seasonal water table is at 52 inches, but there is slowly permeable till at 50 inches, one would be required to design the system based upon the slowly permeable till layer which is beyond the required separation distance.

Changing the wording to include a specific distance for determining the design criteria will provide for the system to be designed for the soil. Using a specific distance will insure that the system is designed for the least permeable soil horizon within the distance needed to adequately treat the effluent.

Comment: In soil science, the term “profile” is used to mean the vertical portion of the soil, not the horizontal portion as should be used here. The terminology should be changed.

Recommendation: ISCA suggests changing the wording of this paragraph to include a specific distance for system design and to correct the terminology as follows: *“The least permeable soil profile layer or horizon between the top of the gravel, gravelless pipe or chamber systems to a depth of 1 foot below the bottom of the seepage trench shall be used to determine the size of*

the subsurface system. For mound or at-grade systems, the upper two feet of the soil shall be used to determine system size.”

Section 905.60 a) 7), page 15679

Comment: The paragraph allows for installation of a system around the seepage field to lower the seasonal high water table, yet no criteria are established for this drainage system. If the drainage system is too close to the seepage field, then untreated effluent will enter the drainage system. Most subsurface drainage systems are connected to other subsurface systems or outlet directly to surface waters. This could provide a potential pathway for untreated effluent reaching surface water and drinking water supplies.

Recommendation: The Illinois Soil Classifiers Association recommends that standards be developed to determine the setback distance and the outlet of a subsurface perimeter drains if they are to be allowed in the Code.

Section 905.60 a) 8) A), page 15680

Comment: To design a system based upon the permeability of the soil above the seasonal water table will not necessarily provide a design that is best suited for that soil. The estimated seasonal high water table has no effect on the permeability of the soil horizon nor the loading rate of the soil. The layers above the seasonal high water table may be more permeable than the layer below the water table that is in the zone of the soil needed to treat the effluent. A design based upon the layer above the seasonal water table may not be adequate to treat the effluent. For example, a soil may have a seasonal high water table (limiting layer) at 24 inches, but have a more slowly permeable layer starting at 30 inches. The proposed code calls for the design to be based upon the soil above the seasonal water table. However, if perimeter drains were allowed to lower the water table, then the layer at 30 inches would impact the movement of effluent more than the soil above 24 inches.

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Changing the wording to include a specific distance for determining the design criteria will provide for the system to be designed for the soil. Using a specific distance will insure that the system is designed for the least permeable soil horizon within the distance needed to adequately treat the effluent.

Comment: In soil science, the term “profile” is used to mean the vertical portion of the soil, not the horizontal portion as should be used here. The terminology should be changed.

Recommendation: ISCA suggests changing the wording of this paragraph to include a specific distance for system design and to correct the terminology as follows: *“The least permeable soil profile layer or horizon between the top of the gravel, gravelless pipe or chamber systems to a depth of 1 foot below the bottom of the seepage trench shall be used to determine the size of the subsurface system. For mound or at-grade systems, the upper two feet of the soil shall be used to determine system size.”*

Section 905.60 c) 1) A), page 15683

Comment: No diameter is listed for the size of the perforations.

Recommendation: Insert a value.

Section 905. Appendix A, Illustration M, Exhibit B – Key for Determining Sewage Subsurface Loading Rates for Illinois Soils

Comment: This exhibit was omitted and was not included in the proposed code for comment. Section 905. Appendix A, Illustration M, Exhibit A has been changed to reflect an edited version of the current Exhibit B.

Recommendation: Include the edited version of Exhibit B that corresponds to the proposed Exhibit A. (see below).

Section 905,Appendix A Illustrations and Exhibits
 Illustration M Subsurface Seepage Loading Rate Key
 Exhibit B

KEY FOR DETERMINING SEWAGE SUBSURFACE LOADING RATES (g/d/sq. ft.) FOR ILLINOIS SOILS (1)

	Single Grain, weak Play (2)	Granular, Angular and Subangular Blocky; Prismatic										Structureless or massive				
		Loess, Outwash, Alluvium, Lacustrine(8) Weak			Moderate, Strong			Till (3) Weak				Moderate, Strong		Loess, Outwash, Alluvium, Lacustrine(8)		
Moist Consistence	lo,vfr, fr	vfr, fr	fi	vfr, fr	fi	vfr, fr	fi	fr	fi	vfr	vfr	fr	fi	vfr, fr	fi, vfi	
Texture	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1. Fragmental; Ext. or vgrs	>1.00 (4)	N/A (5)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
2. s, lcs, ls, grs, cs, grls	1.00	1.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00	N/A	N/A	N/A	N/A	
3. fs, lfs, csl	.84	.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	.91	.84	N/A	N/A	N/A	
4. sl, fsl, grsl, grl, grsil,	.75	.75	N/A	.84	N/A	.69	N/A	.75	N/A	N/A	.84	.75	.69	.62	.52	
5. l, sil, vfrsl, scl, si, vfs, lfs, grcl	.62	.69	.62	.75	.57 .52	.45 (6)	.40 (6)	.62	.52	N/A	.62	.52	.45 (6)	.27 (6)	N/R (7)	
6. silcl, cl (<35% clay)	.52	.52	.45 (6)	.62	.52	.40 (6)	.27 (6)	.52	.40 (6)	.27 (6)	.52	.45 (6)	.27 (6)	N/R	N/R	
7. silcl, cl (>35% clay)	N/A	N/A	.40 (6)	.45 (6)	.40 (6)	.27 (6)	.20 (6)	.40 (6)	.27 (6)	.20 (6)	N/A	.20 (6)	N/R	N/R	N/R	
8. sc, silclay(9)	N/A	N/A	N/A	N/A	.20 (6)(9)	N/A	N/A	N/A	.20 (6)(9)	N/R	N/A	N/A	N/R	N/A	N/R	
9. Organics, Fragric, Lithic, Paralitthic	SOIL PROPERTIES HAVE VERY SEVERE LIMITATIONS: SUBSURFACE DISPOSAL NOT RECOMMENDED															

*see footnotes on next page

FOOTNOTES (to Exhibit B):

- 1) Disturbed soils are highly variable and require special on-site investigations.
- 2) Moderate or strong platy structures for the soil textures in Groups 4, 5 and 6 have a loading rate of 0.40 g/d/sq. ft. Platy structure having firm or very firm consistence and/ or caused by mechanical compaction has a loading rate of 0.0 g/d/sq. ft.
- 3) Basal glacial tills structured by geogenic processes have the same loading rates as structureless glacial till.
- 4) This soil group is estimated to have very rapid permeability and exceeds the maximum established rate in Section 905. Illustration H, Exhibit A of this part.
- 5) N/A means not applicable.
- 6) These soil groups are estimated to have moderately slow to very slow permeability and is less than the minimum established rate in Section 905. Illustration H, Exhibit A of this part.
- 7) N/R means not recommended. These soils have loading rates considered too low for conventional subsurface disposal.
- 8) In some areas, lacustrine material may have physical properties similar to glacial till and should be placed in the glacial till columns.
- 9) Non-swelling (1:1 lattice clays) formed in bedrock residuum have a loading rate of .27 g/d/sq. ft. Swelling (2:1 lattice) clays are not recommended for subsurface disposal.

-submitted by Mark Bramstedt

Constitution Revision Notice

In accordance with Article XIII, Section 1 of the Constitution of the Illinois Soil Classifiers Association, official notice is hereby given that a vote to amend the following will be taken at the Annual Meeting to be held at the Route 66 Hotel and Conference Center in Springfield, Illinois on March 8, 2008.

Proposed Revision (New definition)

Constitution Article IV Section 3.f.

Out-of-State Member is any member who resides in a state other than Illinois, who qualifies under a or b, and who does not practice soil classifying in Illinois.

Reason

It is proposed that the requirement to belong to an organization of professional soil scientists within one's state of residence be dropped from the definition. Justifications for this change are:

- 1) Not all states have professional soil scientist organizations.
- 2) Proof is not required as to whether an out of state member actually belongs to such an organization.

Respectfully submitted,

Constitution, By-Laws, and Legislative Committee

By-Laws Revision Notice

Notice is hereby given that a vote to amend the following will be taken at the Annual Meeting to be held at the Route 66 Hotel and Conference Center in Springfield, Illinois on March 8, 2008.

Proposed Revision

By-Laws Article VI - Nominations and Elections

Section 1. The Nominations Committee shall notify the general membership of the opportunity to submit nominations of eligible candidates for each office of the Association no later than sixty (60) days before the Annual Meeting. The names of potential candidates must be received by the Nominations Committee no later than forty-five (45) days prior to the Annual Meeting.

Section 2. One or more nominations shall be made for each office of the Association, but no Member of the Nominations Committee shall be eligible for the nomination by the Committee. The Nominations Committee shall secure the consent of the nominee before placing his/her name in nomination for a given office.

Section 3. The Nominations Committee shall report the names of the nominees for each office of the Association to the Secretary no later than thirty (30) days before the Annual Meeting. The names of the nominees and ballots shall be circulated to the eligible voters of the membership no later than twenty-one (21) days prior to the Annual Meeting. Space will be provided for write-in candidates other than those selected by the Nominations Committee.

Section 4. The ballots must be returned to the Secretary in a sealed envelope marked "ballot" prior to or at the Annual Meeting. Ballots will be opened and counted at the Annual Meeting by the Nominations Committee.

Reason

Over the past years it has become more of a challenge for the nominating committee to find at least two candidates willing to run for each office. Therefore it is proposed that the committee will open the nominations up to the general membership prior to the annual meeting. If no eligible candidates are nominated, the nominating committee has the discretion to find only one candidate per office. Ballots will still have a space for write-in candidates.

Respectfully submitted,

Constitution, By-Laws, and Legislative Committee

**33rd Annual Meeting
Illinois Soil Classifiers Association**

Saturday, March 8th, 2008
Springfield, IL

Where: Route 66 Inn and Conference Center
625 E. Saint Joseph St.,
(888) 707-8366

Registration: 11:00 am
Opening Remarks: 11:40
Lunch: 12:00
Guest Speaker: 12:45
Panel Discussion: 1:30
Business Meeting: 2:00

The 33rd annual meeting of the Illinois Soil Classifiers Association will be held March 8, 2008 at the Route 66 Hotel and Conference Center <http://www.rt66hotel.com/> located at 625 E. Saint Joseph St. Springfield, IL 62703 with registration beginning at 11am and lunch being served at noon. The meeting room is next to restaurant on the 1st floor of the hotel. Please use registration form below to make a reservation before March 1, 2008. The cost of the meal is \$15. Make checks payable to ISCA.

This year's speaker will be Chad Moorman from Illinois Public Health Department. He will be discussing Soils and the septic code.

Driving Directions: The Route 66 Hotel and Conference Center is located on the south side of Springfield on Business 55, 1.1 mile north of Interstate 55 - 72. From north, east, or south take exit 92A onto Business 55. Left at 2nd stoplight. From west take exit 97B onto Business 55. Left at 2nd stoplight. **See map on the next page.**

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ISCA 2008 Annual Meeting Reservation

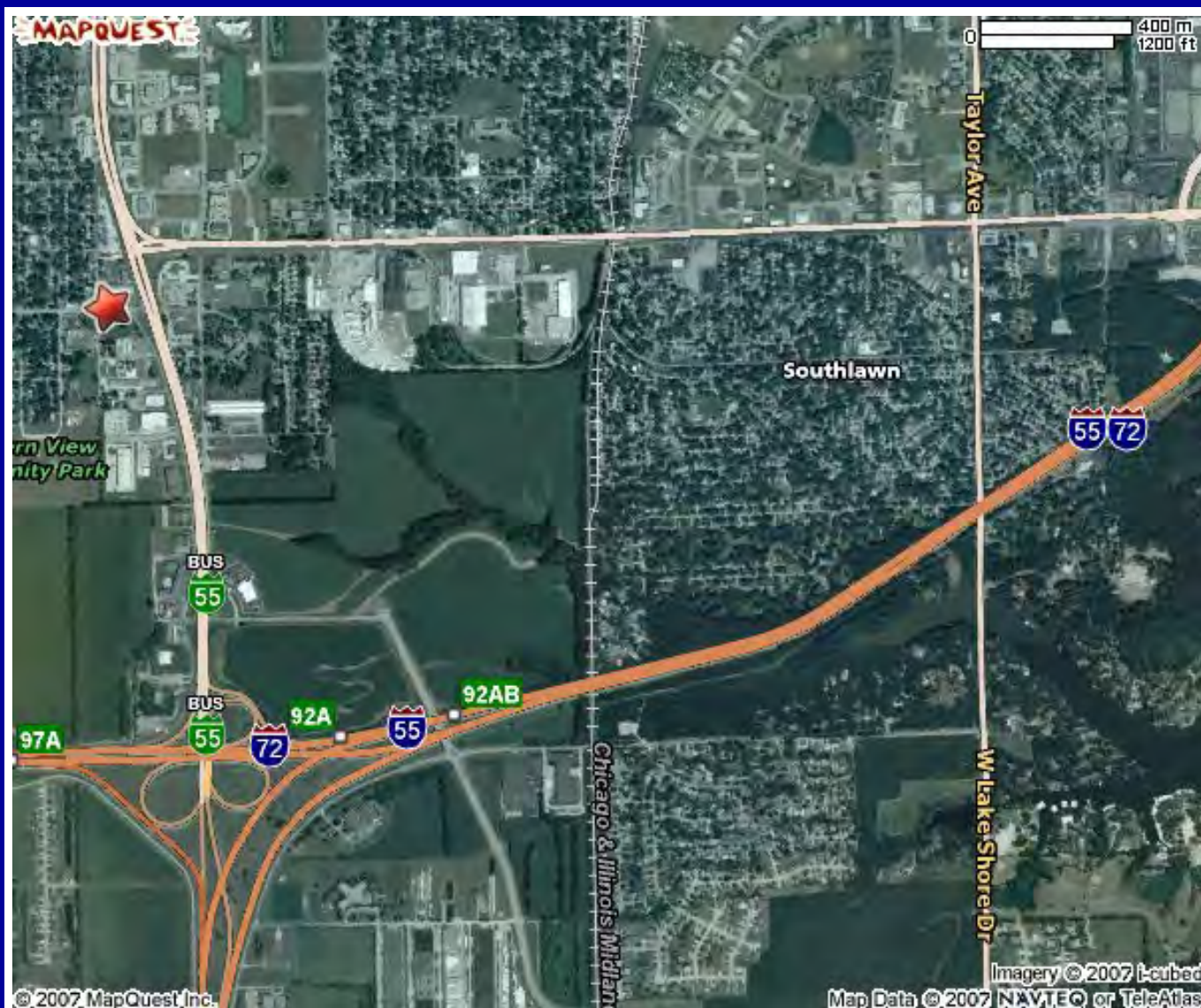
NAME _____

NUMBER ATTENDING _____ (**\$15/person**)

TOTAL PAYMENT _____

Fill out the above information and mail with check to the following address:

**Charles J. Frazee
65 Gaffney Rd
Divernon, IL 62530**



Route 66 Hotel and Conference Center Driving Directions for Annual Meeting

The hotel is located on the south side of Springfield on Business 55, 1.1 mile north of Interstate 55 - 72. From north, east, or south take exit 92A onto Business 55. From west take exit 97B onto Business 55. Hotel is on the west side at 2nd stoplight.

2008 Bent Auger Award

It is again time to select a new winner of the prestigious Bent Auger Award. As its name suggests, this award is given each year to an individual or group of individuals who displays "excellence" in the field. Qualifying events/situations are numerous and unrestricted. Stories do not have to be true, but are preferably based on partial truth. If you know anyone who is deserving of this award for 2008, **please bring his/her nomination to the annual meeting** in Springfield on March 8.

Competition can be fierce, so make sure your story is well prepared and fully exaggerated. This award has been held by many of the leaders and founders of the ISCA. It is a great honor and looks good on any resume. Good luck!

2008 Candidate Biographies

The nominees for President Elect:

Tom D'Avello

Pat Kelsey

The nominees for Vice President:

Frank Heisner

Todd Soukup

The nominees for Treasurer:

Dale Calsyn

Chuck Frazee

President Elect

Tom D'Avello

Tom graduated from Ohio State University where he received his B.S. in Agronomy. He began his career with SCS in eastern Ohio in 1981. He has also mapped in Florida and Montana. In 1986, he went back to school at Michigan Tech and received his M.S. in Forest Soils. After receiving his M.S., he went back to Ohio where he was the survey leader in Ross County. Tom has been the GIS specialist in Illinois since 1990 working on projects such as Soilview, SSURGO, bathymetric mapping, GPS and general GIS applications.

Pat Kelsey

Patrick Kelsey is the Senior Soil Scientist at Christopher B. Burke Engineering, Ltd in Rosemont, Illinois. He was formerly the Research Soil Scientist at the Morton Arboretum. He has been a member of ISCA since 1987 and a Certified Classifier since 1988. He served as Newsletter Editor from 1991-2001. He served as President of ISCA in 1996 and represented ISCA in Conservation Congress IV (1998-2001). Pat and his wife LuAnne live in Montgomery, IL with their two children.

Vice President

Frank Heisner

Frank received his B.S. from Iowa State University in 1988 and his M.S. from the University of Missouri - Columbia in 1997. He began his career with the U.S. Forest Service, Dickinson, North Dakota in 1987, classifying soils as part of a regional soil and land type inventory in Montana, North Dakota, and South Dakota. Frank also functioned as a resource soil scientist during his time with the Forest Service. In 1999, Frank joined NRCS in the MLRA project office in Rock Falls and was the subset leader for the Henderson County Soil Survey Update. He is currently the MLRA Soil Survey Project Leader for northwest Illinois in Rock Falls. Frank enjoys history, the outdoors, and spending time with his family.

Todd Soukup

Todd graduated from Iowa State in 1989 and began his career that year as a soil scientist with the SCS in North Dakota. He moved to Illinois in 1994, taking a position in Glen Ellyn with Environmental S/E, Inc., as a soil scientist primarily responsible for wetland delineations and permitting. He has operated a business providing soil evaluation and ecological management services in the Chicago area since 1997. Todd and his wife Jan live west of Plainfield.

Treasurer

Dale Calsyn

Dale received his B.S. degree in Agronomy from the University of Illinois in 1975. He began his career as a county soil scientist working on the Henry County Soil Survey in 1975. He became a soil scientist with the Soil Conservation Service in 1977. During the period from 1980 through 1990, he served as the project leader for the Cass County Soil Survey, the Mason County Soil Survey, and the Fulton County FSA HEL mapping project. In 1990, he moved to NE Illinois to serve as the project leader for the McHenry County Soil Survey Update. His position there has since evolved into being the team leader for the NE Illinois MLRA update office with the responsibility of overseeing the soil survey updates for 17 counties. He has been a member of the Illinois Soil Classifiers since 1977. His wife, Janice, handles all their financial affairs due to his lack of managerial skills with money especially when it comes to balancing the checkbook.

Chuck Frazee

Chuck has a Ph.D. from the University of Illinois. He is a Charter member of ISCA and is Certified Professional Soil Classifier #10. He has mapped soils in six counties in Illinois. He is presently Treasurer of ISCA and has held this position for the past 9 years.

.....Cut.....Cut.....

2008 ISCA Ballot for Officers

Voting privileges are for Full Members, Associate Members, and Honorary Members
(Vote for one in each office by placing a check or an X next to the candidate's name or write in another name and check or X the space)

President – Elect

Tom D’Avello _____

Pat Kelsey _____

Write-in Candidate Name

Vice President

Frank Heisner _____

Todd Soukup _____

Write-in Candidate Name

Treasurer

Dale Calsyn _____

Chuck Frazee _____

Write-in Candidate Name

Return the ballot in a sealed envelope marked “Ballot” to Steve Elmer, ISCA Secretary before the start of the 2008 ISCA Annual Meeting. You may also mail the Ballot to Steve Elmer, 27560 Ebenezer Road, Geneseo, IL 61254 . Please mark “Ballot” on the outside of the envelope to ensure that the ballot remains sealed before it is counted at the Annual Meeting. In order to be counted, mailed ballots must be received before March 8, 2008.

www.illinoissoils.org

ISCA Newsletter Staff
683 Castle Drive
Charleston, IL 61920

Phone: 217-345-6767
Fax: 217-345-7307
Email: zach.weber@il.usda.gov

Submissions

This is **YOUR** newsletter. If you wish to submit material, here are some preferences.

- Send information by the last week of the month before the newsletter is scheduled to be published.
- Digital copy in Microsoft Word
- Use as little formatting (indents, bullets, charts) as possible. This increases the work to get it into Publisher.

Publication Schedule

- Winter (February)
- Spring (May)
- Summer (August)
- Fall (November)



The Illinois Soil Classifiers Association is an organization promoting the wise use of the soil resource. ISCA is made up of professional soil classifiers in public service, private industry, and education and includes students and others interested in preserving soil. A soil classifier maps, describes and interprets soils according to a national system of soil classification. ISCA was established in 1975 and is affiliated with the American Registry of Certified Professionals in Agronomy, Crops, and Soils.

1st Announcement: 54th Midwest Friends of the Pleistocene Field Conference May 16-18, De Kalb, Illinois

The deglacial history of northeastern Illinois

**Sponsored by the
Illinois State Geological Survey with contributions from Northern Illinois
University, University of Illinois-Chicago, and the Illinois State Museum**

Come discuss and see Illinois-style ice-walled lake plains, large-scale thin-skinned deformation of diamicton, gracefully folded outwash deposits, evidence of large floods, and the Aurora Mastodons (among other things...)!

**Please e-mail Brandon Curry if you are interested in attending
(curry@isgs.uiuc.edu)**

We will send out the 2nd announcement (with the registration form attached) as soon as we have heard positive responses from about 100 people.

2008 Annual Conference National Society of Consulting Soil Scientists

February 20-23
Myrtle Beach, SC

Details on the 2008 NSCSS Annual Conference can be found at the webpages below:

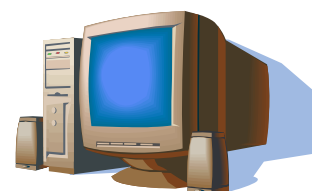
Event website link <<https://www.regonline.com/178639>>

Annual meeting news link <<http://www.nscss.org/forum/viewforum.php?f=2>>

www.illinoissoils.org

New, exciting links have been added to the "announcements" page on our website. Be sure to bookmark this page. Its an excellent resource to keep you informed on the latest soils issues.

Better yet... make it your home page!



Visit the ISCA website to see the color version of this newsletter

www.illinoissoils.org/news

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Change of Address Form

Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

E-Mail: _____

*Mail to: Steve Elmer, ISCA Secretary, 27892 Ebenezer Road, Geneseo, IL 61254



Illinois Soil Classifiers Association Newsletter

Spring-May 2008

Upcoming Events:

ISCA/WSPSS/ AWSS Joint Fall Meting and Field Tour	6
Abstracts for Technical Session #143	6
54 th Midwest Friends of the Pleistocene Field Conference	9

Inside this issue:

Membership News	2
Trading Post	2
Days Gone By...	3
2008 Budget	4
Soils Training Sessions for County Health Departments	5
Soil Scientists Get Their Kicks on Route 66	7
And the Award Goes to...	7
Annual Meeting Pics	8
Requests for Pictures	9

Message from the President

Greetings from your new ISCA President and from slightly west of western Illinois! And congratulations to our new officers: Tom D'Avello (President-elect), Frank Heisner (Vice President), and Chuck Frazee (Secretary). I appreciate the opportunities I've had to work with several of you already, and look forward to working with more of you through ISCA the rest of this year.

In looking over several old "President's Column" articles from previous newsletters I didn't really see that there is a particular protocol for what should be written about, so I'd like to share some brief thoughts on two issues.

First, I believe this is a great time to be involved in soil science. The U.S. Army Corps of Engineers is in the process of revising their 1987 Wetland Delineation Manual by developing Regional Supplements for several regions of the U.S. As these Regional Supplements are implemented there will be a greater reliance on hydric soil indicators when wetlands are delineated. Personally, I hope this will do away with the delineations where soils were called hydric because they had a 10YR2/1 A horizon that was 12 inches thick!

Second, have you scheduled some time off? It sounds like a strange thing for the president of a professional organization to talk about, but relevant, I believe. A speaker recently talked about "margins", and explained that many people today have packed so much into their lives that there is little time for rest. This generates stress, and then when something comes along to complicate the routine, we have no time or energy left over to deal with it. There's a lot more good instruction regarding this topic, I can get it to you if you are interested.

But now I'm going to take my own advice, end this column and go take a nap!

Regards,
Scott
Scott Wegman
573-541-7645
ebsoil@marktwain.net

P.S. OK, I didn't really take a nap, but I will try to slow down some.

Illinois State Soil T-Shirts Still Available

Short Sleeve -- \$12

Long Sleeve -- \$14

Shipping and Handling \$5 per order

Order by contacting Steve Elmer

E-mail : torflagr@geneseo.net



ISCA Membership News

ISCA Welcomes New Members

Joel Gruver-Associate Member
-biography to follow

Scott Wiesbrook-Full Member
-biography to follow

Jericho Winter - Student Member

My name is Jericho Winter and I am a native of Prophetstown in Whiteside County. In May of 2007 I received my B.S. degree in Geography from Northern Illinois University with a specialization in Natural Environmental Systems. In the fall of 2007 I started working on a master's degree in Geography at NIU. My research project involves hydric soil morphology and evaluating hydric soil identification methodology. In the fall of 2007 I was given the privilege of traveling to Marshall, IL as an assistant coach for NIU's first soil judging team and am looking forward to doing so again in the fall of 2008. I love to travel and have always wanted to learn a second language. I also enjoy running, biking, swimming, and spending time outdoors.



TRADING POST

This spot is reserved for members who would like to buy, sell, trade, or announce an item, event, or activity in our newsletter. Please limit your classified ad to 25 words or less. Email your ad to the newsletter at zach.weber@il.usda.gov

- ISCA ball caps available for \$9 (includes S&H). Contact Steve Elmer at torflagr@geneseo.net
- Drummer T-Shirts available in 2 colors (see front cover). Short sleeve - \$12 Long sleeve - \$14
- 2000 4100 4WD JD hydrostatic drive, low hours, with Giddings rear-mounted 5-TS soil probe, storage boxes, and many accessories. Call A&E Soil Consultants@ 309-945-9090.



Days Gone By...



1983 Ford County Soil Survey Crew. From L-R: Don Fehrenbacher, Bruce Putnam, Bill Teater, and Jon Stika
-submitted by Mark Bramstedt from Kent Sims



Field Review of the Winnebago-Boone Counties soil survey in 1973. From L-R: Steve Zwicker, Dana Grantham, Burt Ray, Henry Mount, George Huddleson, and Steve Higgins.
-photo taken by Earl Voss and submitted by Mark Bramstedt

ISCA 2008 Budget

	Budget	Actual
Income		
Annual / Joint Fall Meeting	\$1,000.00	
Dues, Membership	\$2,200.00	
Dues, Certification & App. For Cert.	\$1,200.00	
Interest	\$80.00	
Bookmarks	\$25.00	
Hats	\$25.00	
Shirts	\$50.00	
Soil Tubes (Drummer)	\$25.00	
Workshops	\$500.00	
Soil Cards	\$25.00	
TOTALS	\$5,130.00	
Expenses		
Administration	\$400.00	
Annual / Joint Fall Meetings	\$1,500.00	
Certification Board	\$100.00	
Awards (Burt Ray & Reg. 3 SS)	\$400.00	
Web Page (annual)	\$96.00	
Miscellaneous	\$100.00	
Public Relations	\$200.00	
Soil Judging (Support Illinois team)	\$500.00	
Soil Survey Horizons	\$1,600.00	
Workshops IDPH Statewide	\$500.00	
TOTALS	\$5,396.00	

submitted by Roger Windhorn

Soils Training Sessions for County Health Departments

ISCA, NRCS and the Illinois Department of Public Health sponsored five very successful training sessions around the state for county health department employees. Sessions were held at Springfield, Allerton Park, Du Quoin, Galesburg, and Wheaton with approximately 130 people attending. This training was conducted as a result of a need which was identified in the ISCA Multi-Year Plan. The Multi-Year Plan was developed by the Public Relations and Education Committee and approved by the Executive Council in 2007. The goal of the sessions was to educate health department employees, who are involved with private sewage disposal, about the importance of soil evaluations in the design of septic systems. We received many positive comments about each session from those who attended. Following, is an agenda with a list of the many soil classifiers who served as instructors. This training would not have been possible without their participation. A special thank you goes to Bob McLeese and Bill Gradle for allowing the NRCS soil scientists to help with these sessions.

Thanks to all who participated.

Mark Bramstedt and Roger Windhorn

Soil Evaluation in the Illinois Private Sewage Code

April 1, Springfield, April 8, Allerton Park, April 15, Du Quoin, April 22, Galesburg, April 29, Wheaton

9:00 AM	Introductions	<i>Chad Moorman, IDPH Program Director</i>
9:10	Soil and Site Characteristics	<i>Roger Windhorn</i>
10:30	Sewage Code Soil Key & Soil Evaluation Form	<i>Paul Brown, Springfield Session</i> <i>J. Wiley Scott, Allerton Park Session</i> <i>Scott Harding, Du Quoin Session</i> <i>Steven Zwicker, Galesburg Session</i> <i>William Kreznor, Wheaton Session</i>
11:00	Using the Soil Survey as a Guide	<i>Mark Bramstedt, (Bob McLeese, Allerton)</i>
11:20	How Water Moves Through the Soil .	<i>Mark Bramstedt, (Bob McLeese, Allerton)</i>
12:00	Lunch	
1:00	Private Sewage Disposal Code	<i>Chad Moorman</i>
1:15	Significant Regional Soil Characteristics	<i>Steven Suhl, Springfield Session</i> <i>Ken Gotsch, Allerton Park Session</i> <i>Jerry Berning, Du Quoin Session</i> <i>Stephen Higgins, Galesburg Session</i> <i>Dale Calsyn, Wheaton Session</i>
1:30	Soil Evaluation – Small Group Exercise	<i>Groups</i>
3:15	Question and Answer Session.....	<i>All</i>
3:30	Adjourn	
	Others who assisted with the soil evaluation exercises:.....	<i>Ron Collman (Allerton)</i> <i>Matt McCauley (Du Quoin)</i> <i>Frank Heisner (Galesburg)</i> <i>Jeff Deniger (Wheaton)</i>

ISCA/WSPSS/AWSS Joint Fall Meeting and Field Tour

Mark your calendars for the our fall meeting and field tour. This will be a joint meeting with the Wisconsin Society of Professional Soil Scientists and the Association of Women Soil Scientists – a great opportunity to mix with professionals from other areas. Plans are still being developed, but the tentative agenda is below.

Dates: October 15 and 16, 2008

Location: Illinois Beach State Park, Spring Bluff Forest Preserve, Lyons Woods Forest Preserve near Zion, IL.

Tentative Agenda

Wednesday 10/15 – Illinois Beach Resort and Conference Center

7:00-8:30 pm – Presentations by:

Jim Miner, ISGS geologist will discuss the history of Glacial Lake Chicago and the Lake Border Moraines and his study of the water table at Spring Bluff

Don Wilson, Steward of the Illinois Beach State Park will discuss the natural resources and human impact of the area

Representatives from each professional organization

Other guest speakers? to be determined

8:30 – ? pm

Social time to interact with our fellow soil scientists

Thursday 10/16 – 8:00 am – 1:00 pm

Start at Spring Bluff Forest Preserve to see soils formed in the deposits of Glacial Lake Chicago.

Mid-morning break which will include a Texturing Contest

Travel to Lyons Woods Forest Preserve to see till soils of the Lake Border Moraine

A block of 20 rooms have been reserved at the Illinois Beach Resort and Conference Center at the rate of \$89 + tax.

<http://www.ilresorts.com/> Call the resort at (847) 625-7300 before September 15 to guarantee a room. Camping facilities are available in the state park and other motels are in nearby Zion and Winthrop Harbor.

PR&E Committee: Karla Petges, Jennifer Wollenweber, Christy Sabdo, Bob McLeese, Mark Bramstedt, and Jesse Kurylo

Abstract Submission for Technical Session #143

Dear Colleagues:

We call your attention to Technical Session # 143, titled: The Origin of Mima (Pimple, Prairie) Mounds and Similar Microrelief Features: Multidisciplinary Perspectives, at the joint meeting of the Geological Society of America, Soil Science Society of America (SSSA), American Society of Agronomy (ASA), Crop Science Society of America (CSSA) and the Gulf Coast Association of Geological Societies (GCAGS) in Houston, Texas, October 5-9, 2008. We welcome abstracts submitted on this theme.

GSA Technical Sessions - Abstract submission deadline: 3 June.

For abstract submission details, go to: <http://www.geosociety.org/meetings/2008/index.htm>

-submitted by Don Johnson (dljohns@uiuc.edu) and Rolfe Mandel (mandel@kgs.ku.edu).

Soil Scientists Get Their Kicks on Route 66

The 33rd ISCA Annual Meeting was held at the Route 66 Inn and Conference Center in Springfield on March 8 with President Ken Gotsch, presiding. About 30 members attended.

After a presentation and slide show of the successful 2007 Forest Soils Workshop by Matt McCauley we had a very nice buffet luncheon. Chad Moorman, Director for the Illinois Department of Public Health Private Sewage Disposal Program was our keynote speaker. Chad discussed issues with soils and septic and presented information about the proposed changes in the septic code. Chad was followed by a panel of four soil classifiers (Wiley Scott, Steve Zwicker, Jerry Berning, Bruce Putman) who discussed how some of the proposed changes in the code would impact the way soil classifiers do business. This was an excellent dialogue and some opportunity was given for the rest of the membership to participate in the discussion.

The business meeting had a full agenda. Changes were approved to the definition of "Out of State" members. Also approved was a major change in how ISCA will elect officers beginning in 2009. See the Membership Handbook on the ISCA web page for full details of these changes.

A presentation of the Burton W. Ray Award was made by Mark Bramstedt, chair of the Public Relations and Education Committee to Jenwei Tsai, the 2007 winner. Jenwei's advisor, Robert Darmody was also there for the presentation.

We had some great door prizes awarded and the Bent Auger award was given to Mark Bramstedt. (He was framed by Roger Windhorn, the 2007 winner).

For those who attended, it was an enjoyable and educational meeting. It's too bad more of our membership could not attend, especially when our keynote speaker was presenting information that could have a great impact on our profession. Remember, our meetings are an easy way to earn CEUs for certification renewal for both ISCA and ARCPACS.

Tom D'Avello was elected as the new President Elect, Frank Heisner as the Vice President, and Charles Frazee as the Treasurer. For full details of the meeting, watch for the Secretary's minutes.

-submitted by Mark Bramstedt

And the Award Goes to...

The Bent Auger Award started in 1977. The purpose of award is to recognize an individual who has distinguished himself or herself by some legendary gaffe worthy of recognition for posterity (whether real or imaginary). This years recipient of the Bent Auger award goes to Mark Bramstedt. Mark was nominated by last year's recipient, Roger Windhorn. Roger was asked to write up something for Mark's nomination and his comments are as follows: "Yes, I was the one that nominated Mark for this prestigious award.....but duly noted, AFTER Mark had nominated me for it (totally bogus, set up!) last year! So... I scanned my memory bank and came up with a couple flubs that Mark had committed over the years. One was for putting his mapboard on top of his vehicle and then driving off down the road. The mapboard blew off and was totally annihilated by a semi that was following Mark. Another incident had Mark backing into a tree at the 4-H camp in Allerton and putting a curl in his bumper. McLeese was standing right there! So....Mark wins!" I don't know about everyone else but this sounds like a plot for revenge! Congratulations Mark.



Annual Meeting Pics



ISCA Council Meeting prior to the Annual Meeting



Ken Gotsch addresses members one last time as President



Matt McCauley gives a summary about the Forest Soils Workshop in Carbondale which the ISCA helped host.



Keynote speaker Chad Moorman, Director for the Illinois Department of Public Health Private Sewage Disposal Program discusses issues with soils and septic.



Mark Bramstedt presents the Burton W. Ray Award to Jenwei Tsai, the 2007 winner. Pictured also is Jenwei's advisor, Robert Darmody.



Soil classifiers Wiley Scott, Steve Zwicker, Jerry Berning, and Bruce Putman discuss how some of the proposed changes in the septic code would impact the way soil classifiers do business.

www.illinoissoils.org

ISCA Newsletter Staff
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Charleston, IL 61920

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Email: zach.weber@il.usda.gov

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The deglacial history of northeastern Illinois

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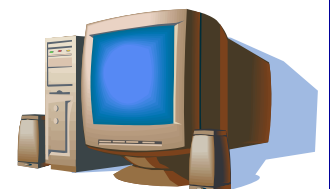


ISCA Newsletter Committee is looking for pictures of it's members, past or present, to include in future newsletters. Submissions can be sent electronically or hard copy to the staff address, see above and left. Please include a narrative for the caption! If hard copies are sent please indicate if they are to be returned otherwise photographs will be retained in an archive photos file.

www.illinoissoils.org

New, exciting links have been added to the "announcements" page on our website. Be sure to bookmark this page. Its an excellent resource to keep you informed on the latest soils issues.

Better yet... make it your home page!



Visit the ISCA website to see the color version of this newsletter

www.illinoissoils.org/news

.....Cut.....Cut.....

Change of Address Form

Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

E-Mail: _____

*Mail to: Steve Elmer, ISCA Secretary, 27892 Ebenezer Road, Geneseo, IL 61254



Illinois Soil Classifiers Association Newsletter

Summer-August 2008

Upcoming Events:

Illinois Conference on Soil and Water Science	12-13
ISCA/WSPSS/ AWSS Joint Fall Field Trip	14-16

Inside this issue:

Membership News	2
Trading Post	2
Soils Exhibition to Debut at the Smithsonian	3
Smithsonian News Release	4
Exhibition Fact Sheet	6
New Publication- <u>SOIL! Get the Inside Scoop</u>	7
Soil Recognized by U.S. Senate	9
Invitation - Illinois Conference on Soil and Water Science (ICSWWS)	12
Agenda - ICSWWS	13
ISCA/WSPSS/ AWSS Joint Fall Field Trip	14
Fall Tour Registration	15
Fall Tour Map	16
Days Gone By...	17

Message from the President

Hello, all!

For most of us summer is probably flying by, and it won't be long until we will be wondering where 2008 went. As soil classifiers, most of us probably feel like the responsibilities that require our attention make our days go quickly. So while we are amazed and possibly frustrated that our time seems to go by quickly, I suggest we take a little time to think about how thankful we can be that we work in this field. Sometimes when I've talked to people about what I do, I tell them that there are days when I think "Wow, I'm getting paid to do this!" – that's not every day, by the way. If we can say this even some of the time we have a great deal to be thankful for, even if it makes the days go by quickly.

Regards,
Scott
Scott Wegman
573-541-7645
ebsoil@marktwain.net

Don't miss this year's ISCA Fall Tour - cosponsored by the Wisconsin Society of Professional Soil Scientists and the Association of Women Soil Scientists. Details within (pages 14-16).

Illinois State Soil T-Shirts Still Available

Short Sleeve -- \$12
Long Sleeve -- \$14
Shipping and Handling \$5 per order
Order by contacting Steve Elmer
E-mail : torflagr@geneseo.net



ISCA Membership News

ISCA Welcomes New Members

Scott Wiesbrook-Full Member

My name is Scott Wiesbrook, and I am a soil/wetland scientist at the Illinois Natural History Survey (now within the Institute for Natural Resource Sustainability at the University of Illinois). I map hydric soils throughout the state for IDOT projects, and assist the IDOT in selecting and monitoring sites for wetland mitigation, creation, and restoration efforts. I am also able to use some work time for outreach activities, such as organizing and helping judge (along with Steve Zwicker) the 2004 NACTA national soil judging contest held in Geneseo, IL, and organizing and helping judge (along with Ron Collman, Troy Fehrenbacher, and Zach Weber) the 2007 ASA Region III soil judging contest held in Marshall, IL.

I grew up outside of Mineral in Bureau County and became interested in soils with my first FFA soil judging contest in high school. From that first day on I have been involved with soil judging, either as a participant or coach. I currently help Bob Darmody with the U of I team and coach the Black Hawk College, East Campus (BHE) 2 year team. Our BHE team has won 2 national championships and finished in the top 3 nationally every year, and we expect a strong performance this coming year as well. The U of I team has shown a resurgence lately, with 3 top 6 finishes nationally in the last 4 years.

My wife and I reside in rural Philo with our 2 year old son Nathaniel and our 2 month old daughter Lucille in a 140+ year old farmhouse. We have numerous flower gardens and a vegetable garden which is currently keeping us busier than we need to be harvesting and preserving food for winter.



Scott Wiesbrook in a field of pineapples growing on an area of Waialua silty clay - Oahu, Hawaii

TRADING POST

This spot is reserved for members who would like to buy, sell, trade, or announce an item, event, or activity in our newsletter. Please limit your classified ad to 25 words or less. Email your ad to the newsletter at zach.weber@il.usda.gov

- ISCA ball caps available for \$9 (includes S&H). Contact Steve Elmer at torflagr@geneseo.net
- Drummer T-Shirts available in 2 colors (see front cover). Short sleeve - \$12 Long sleeve - \$14
- 2000 4100 4WD JD hydrostatic drive, low hours, with Giddings rear-mounted 5-TS soil probe, storage boxes, and many accessories. Call A&E Soil Consultants@ 309-945-9090.



Soils Exhibition to Debut at the Smithsonian in July

Get the "dirt" on soil at an exciting new exhibition called **"Dig It! The Secrets of Soil"** at the **Smithsonian's National Museum of Natural History (NMNH)** in Washington, D.C., **opening July 19, 2008.**

This 5,000-square-foot exhibition will focus on how soil impacts all life on earth. Visitors will use interactive displays to look at the science of soil, from agriculture to its role as "secret ingredient" in medicines, food, wine, textiles, paint, cosmetics, and pottery, as well as in supporting life and death. Hands-on models will demonstrate the roles of soil around the house and in public spaces like dams, playing fields, and roads.

This major new exhibition will explain differences among soil types, featuring soil samples from all U.S. states and territories and features a world map of soils. The exhibition will be housed at the NMNH through January 2010, then travel to museums around the country through September 2013.

Attached are the components of our electronic Press Kit, including a news release, and list of displays. For visuals and more information about the exhibition, visit the NMNH site at <http://forces.si.edu/soils> and the Soil Science Society of America's site at <http://www.soils.org/smithsonian>. High-resolution photos are available online at http://newsdesk.si.edu/photos/nmnh_dig_it.htm.

On behalf of the Soil Science Society of America, Madison, WI, the Founding Sponsor of "Dig It!" we hope that you will publish this information.

Very best regards,

Sara

Sara Uttech, Communications Manager

Soil Science Society of America

677 South Segoe Road, Madison, WI 53711

608-268-4948, suttech@soils.org

SSSA is the Founding Sponsor of the exhibition, "Dig It! The Secrets of Soil," opening July 19, 2008 at the Smithsonian's National Museum of Natural History
www.soils.org/smithsonian



Soils exhibits at the Smithsonian's National Museum of Natural History (NMNH) in Washington, D.C.
-photos by John Steiner/Joseph Talman

Please see the [News Release](#) and [Exhibition Fact Sheet](#) on the following pages.



Smithsonian
National Museum of Natural History

News

Media only: Randall Kremer (202) 633-2950
Kelly Carnes (202) 633-2950

June 6, 2008

Media Web site: <http://newsdesk.si.edu>

New Natural History Exhibition Reveals the Impact of Soil on All Life on Earth

There are more living creatures in a shovel-full of soil than human beings on the planet, yet more is known about the dark side of the moon than about soil. These are just a couple of the fascinating facts visitors can learn from the new temporary exhibition "Dig It! The Secrets of Soil," open July 19 through Jan. 3, 2010 at the Smithsonian's National Museum of Natural History.

The 5,000-square-foot exhibition reveals the complex world of soil and how this hidden ecosystem supports nearly every form of life on Earth. The exhibition is sponsored by the Soil Science Society of America and the Nutrients for Life Foundation, which is underwritten by The Fertilizer Institute.

"Dig It!" includes interactive displays, hands-on models, videos and soil samples. Curious visitors will get the dirt on this little-known subject through audiovisual and interactive components, from a set of interactive soil stratigraphy blocks to a crime scene investigation video focusing on the processes of decay to a computer kiosk where visitors can learn about their state soil.

Visitors can also explore soil found in their own backyard and in obscure locations, with 54 soil samples representing each U.S. state and territory and the District of Columbia, as well as soil maps and touchable soil models from around the world. In doing so, visitors will discover a world teeming with life. In fact, so many organisms contribute to the health of soil that scientists have not even named them all.

"This is the most ambitious exhibition ever dedicated to soil, a resource as important to life on Earth as water and air," said Patrick Megonigal, soil scientist for the Smithsonian Environmental Research Center, which is located in Maryland near the Chesapeake Bay. Megonigal is the exhibition's lead curator.

"Dig It!" shows how every type of soil is unique. Visitors can observe the way water moves through different soils in tumbler tubes containing sand, silt, clay and loam. The flow of water through

SI-251A-2008

SMITHSONIAN INSTITUTION MRC 135 PO Box 37012 Washington DC 20013-7012 Telephone 202.633.2950 Fax 202.786.2982

soil can affect minerals and gases and all life that depends on soil. Soil color tells fascinating stories about mineral compositions and soil formation or history. “Dig It!” color cards help visitors to unveil the stories behind soil samples. Visitors also can get in touch with their inner detective and learn about the soil food web in the “Matters of Life and Death Theater.”

“The mission of this exhibition to educate millions about the importance of soils truly aligns with the Soil Science Society of America’s own purpose of advancing soils as being fundamental to life,” said SSSA President Gary A. Peterson. “Soil has an impact on climate change and our carbon footprint, among other important environmental issues.

After examining soil close up, exhibition visitors can step back and see the “big picture” with a world map and interactive stations that present the connection between soil and global systems. Models demonstrate the roles of soil around the house and the formation of soil in commercial and residential construction, dams, playing fields, neighborhoods, roads and in food production. An evocative video explains soil’s role as a “secret ingredient” in such household goods as medicines, food, wine, textiles, paint, cosmetics and pottery.

“The exhibition paints a remarkable picture of soils and their role as a reservoir of life,” said Ford West, The Fertilizer Institute and Nutrients for Life Foundation president. “Preserving the health of soils around the globe is critical to our ability to produce nutritious foods for future generations.”

Following its showing at the National Museum of Natural History, “Dig It!” will travel to 10 museums across the country through 2013 under the auspices of the Smithsonian Institution Traveling Exhibition Service. For more information about the traveling exhibition, visit www.sites.si.edu/soils. Additional information about “Dig It! The Secrets of Soil” is available at <http://forces.si.edu/soils>.

The National Museum of Natural History, located at 10th Street and Constitution Avenue N.W. in Washington, D.C., welcomed more than 7 million visitors in 2007. The museum is open daily from 10 a.m. to 7:30 p.m. through Aug. 31 and from 10 a.m. to 5:30 p.m. thereafter. Admission is free. More information about the museum is available at www.nmnh.si.edu or by calling Smithsonian Information at (202) 633-1000, TTY (202) 633-5285.

###



EXHIBITION FACT SHEET

Starting July 19, 2008, visitors to the Smithsonian's National Museum of Natural History can journey into the skin of the earth and explore the amazing world of soils in the new exhibition, **Dig It! The Secrets of Soil**. Completely familiar yet largely unknown, soils help sustain virtually every form of life on Earth. Still, it is said that we know more about the dark side of the moon than we do about the Earth beneath our feet. **Dig It!** will transport visitors to the world of fungi, bacteria, worms, and countless other organisms. Visitors will discover the amazing connections between soils and everyday life and think about this hidden world in a whole new way.

EXHIBITION FEATURES

In the *"At Home in the World of Soils"* gallery, visitors explore the connections between soil and culture. While we walk on soils every day, we rarely think about how soils affect our daily lives. This gallery explores these connections with a scale model of a typical suburban house lot that highlights soils in and around our homes. Nearby, an evocative video features soils as the "secret ingredients" in thousands of everyday items including medicine, food, fiber, paint, cosmetics, and pottery.

The *"Underneath it All"* gallery explores soils in a broader perspective. A large topographic model illustrates the role of soils in residential, urban, and agricultural areas. Touchable soil samples provide closeup looks of two very different urban soils found right here in Washington, D.C. Exhibit panels examine how soil management can help meet modern day demands for food production, infrastructure construction, and environmental protection.

"The Big Picture" area gives the global view, symbolized by a centrally-placed art sculpture depicting soils at the center of Earth's water, nutrient, life, and carbon cycles. A world map and computer interactive stations highlight surprising global connections to soils. Nearby, the *"Get Soil Savvy!"* display uses dramatic images and video to explore the importance of soils in land management and conservation.

Curious visitors can also dig into life, death, and decay in the *"Matters of Life and Death Theater,"* where a ten-minute video follows an edgy detective story about the micro- and macroscopic soil food web. Outside the theatre, visitors learn more about how microorganisms that inhabit soils impact our planet. Visitors can activate two soil "breathalyzers" (infrared gas analyzers) and detect the amount of carbon dioxide produced by soil organisms in two very different environments.

In *"Sizing Up Soils,"* visitors will get the dirt on soils in an array of fun interactives and exhibition stations. A *"Chef's Challenge"* kitchen features two flamboyant "soil chefs" who create two very different soils from the same ingredients. Visitors can find their "home earth" in a display of 54 soil samples, or "monoliths," representing each state in the nation, the U.S. Virgin Islands, Guam, Puerto Rico, and the District of Columbia. Visitors become soil detectives and use clues to deduce what landscapes three mystery soils support. Other interactives explore soil color, texture, particle size, and minerals.

Dig It! is located on the second floor of the Smithsonian's National Museum of Natural History.



Smithsonian
National Museum of Natural History

SOIL! Get the Inside Scoop



Get kids excited about the living world of soil with this new publication from the Soil Science Society of America.

Written for children aged 9–12, this 36-page, full-color book explores how soil is part of our life—the food we eat, the air we breathe, the water we drink, the houses we live in, and more. Along the way, readers learn about different kinds of soil and meet the scientists who work with soil every day.

Give this book as a gift to a child you know, or buy in bulk for donation to local classrooms, libraries, and after-school programs. It's a wonderful way to share your passion for soils with the next generation of soil scientists.

2008, Softcover, 32 pages
 Soil Science Society of America
 ISBN: 978-089118-848-3
 Item number: B60913
 \$20 (Member/Bookseller: \$16)

ORDER TODAY

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"Packed full of fascinating information—provided a unique opportunity for my students to understand the relationship of soil to their personal health and well being. A must-have for the class library or for any parent who wants to connect their child to Earth stewardship."

—Julie Rosen, 4th Grade Teacher, Woods Charter School, Chapel Hill, NC



Soil Science Society of America | 677 South Segoe Road, Madison, WI 53711
 TEL: 608-273-8080 | FAX: 608-273-2021 | www.soils.org

Order Form**SOIL! Get the Inside Scoop**

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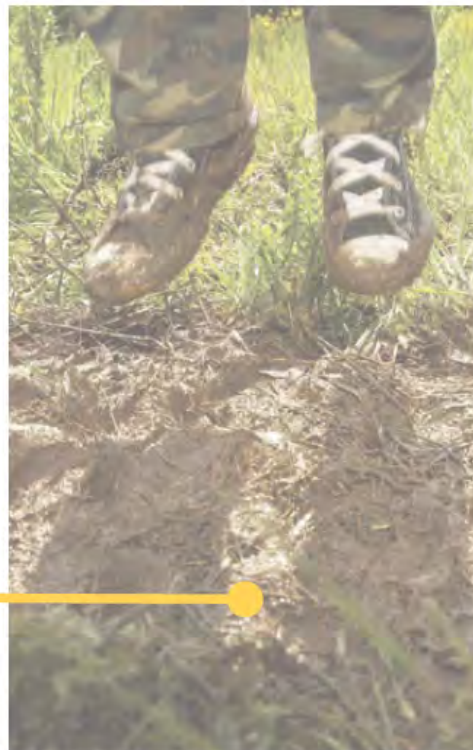
Signature _____

Send orders to:

Soil Science Society of America
 Attn: Book Orders
 677 S. Segoe Road
 Madison, WI 53711-1086

Questions on the book?

Please contact Lisa Al-Amoodi at SSSA, 608-268-4971.



Soil Science Society of America

Soil Recognized by U.S. Senate

III

110TH CONGRESS
2D SESSION

S. RES. 440

Recognizing soil as an essential natural resource, and soils professionals as playing a critical role in managing our Nation's soil resources.

IN THE SENATE OF THE UNITED STATES

JANUARY 31, 2008

Mr. BROWN (for himself, Mr. VOINOVICH, Mr. GRASSLEY, Mr. SALAZAR, Mr. FEINGOLD, Mr. CONRAD, and Mr. HARKIN) submitted the following resolution; which was referred to the Committee on Agriculture, Nutrition, and Forestry

JUNE 23, 2008

Committee discharged; considered and agreed to

RESOLUTION

Recognizing soil as an essential natural resource, and soils professionals as playing a critical role in managing our Nation's soil resources.

Whereas soil, plant, animal, and human health are intricately linked and the sustainable use of soil affects climate, water and air quality, human health, biodiversity, food safety, and agricultural production;

Whereas soil is a dynamic system which performs many functions and services vital to human activities and ecosystems;

2

Whereas, despite soil's importance to human health, the environment, nutrition and food, feed, fiber, and fuel production, there is little public awareness of the importance of soil protection;

Whereas the degradation of soil can be rapid, while the formation and regeneration processes can be very slow;

Whereas protection of United States soil based on the principles of preservation and enhancement of soil functions, prevention of soil degradation, mitigation of detrimental use, and restoration of degraded soils is essential to the long-term prosperity of the United States;

Whereas legislation in the areas of organic, industrial, chemical, biological, and medical waste pollution prevention and control should consider soil protection provisions;

Whereas legislation on climate change, water quality, agriculture, and rural development should offer a coherent and effective legislative framework for common principles and objectives that are aimed at protection and sustainable use of soils in the United States;

Whereas soil contamination coupled with poor or inappropriate soil management practices continues to leave contaminated sites unremediated; and

Whereas soil can be managed in a sustainable manner, which preserves its capacity to deliver ecological, economic, and social benefits, while maintaining its value for future generations: Now, therefore, be it

1 *Resolved*, That the Senate—

2 (1) recognizes it as necessary to improve knowl-
3 edge, exchange information, and develop and imple-
4 ment best practices for soil management, soil res-

3

1 toration, carbon sequestration, and long-term use of
2 the Nation's soil resources;

3 (2) recognizes the important role of soil sci-
4 entists and soils professionals, who are well-equipped
5 with the information and experience needed to ad-
6 dress the issues of today and those of tomorrow in
7 managing the Nation's soil resources;

8 (3) commends soil scientists and soils profes-
9 sionals for their efforts to promote education, out-
10 reach, and awareness necessary for generating more
11 public interest in and appreciation for soils; and

12 (4) acknowledges the promise of soil scientists
13 and soils professionals to continue to enrich the lives
14 of all Americans by improving stewardship of the
15 soil, combating soil degradation, and ensuring the
16 future protection and sustainable use of our air, soil,
17 and water resources.

○

Invitation - Illinois Conference on Soil and Water Science

July 30, 2008

Dear Ladies and Gentlemen:

On behalf of the College of Agricultural, Consumer and Environmental Sciences (ACES) and the Department of Natural Resources and Environmental Sciences (NRES) at the University of Illinois, we are pleased to invite you to attend the *Illinois Conference on Soil and Water Science: Our Science and Society* (ICSWS), which will be held on September 16, 2008, 9:30 a.m. to 5:00 p.m. at the Farm Credit Services Center near Mahomet, Illinois, about 10 miles northwest of Champaign. The Keynote Speaker will be Dr. J. Patrick Megonigal, Lead Curator, Worlds Underfoot Exhibition (National Soils Exhibit) and Senior Scientist, Smithsonian Environmental Research Center, Edgewater, Maryland. The Conference will also include a presentation on the planned reconstruction of the Soils Teaching Laboratory at the University of Illinois and presentations by members of the College faculty on topics relevant to soil and water science in a changing society. Please see the enclosed agenda for more details.

Sponsors of the Conference include: the College of ACES Office of the Dean and Office of Research, Department of Natural Resources and Environmental Sciences (NRES), the Environmental Change Institute (ECI), and the Agroecology and Sustainable Agriculture Program (ASAP).

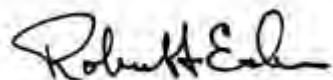
Registration is required but is free of charge and provides participants with admittance to the Conference sessions, lunch, and free parking. Please register at your earliest convenience (but before August 22) by e-mail to pasar-ver@illinois.edu. Please enter "ICSWS" in the subject line and provide the following information in the e-mail body:

Name
Title
Affiliation
Mailing Address
E-mail Address
Phone Number
Fax Number

If you have any questions about registration, directions, or logistics, please contact Patty Sarver at pasar-ver@illinois.edu or 217-333-8901. If you have questions related to the science of the Conference, please contact Professor Joseph W. Stucki at jstucki@illinois.edu or 217-333-9636.

We hope you will join us for this Conference and gain a glimpse into the exciting opportunities and challenges facing soil and water science at the University of Illinois.

Sincerely,



Robert A. Easter, Dean
College of Agricultural, Consumer and
Environmental Sciences



Bruce E. Branham, Department Head of
Natural Resources and Environmental
Sciences

Illinois Conference on Soil and Water Science: Our Science and Society

September 16, 2008
Farm Credit Services Building, Mahomet, Illinois

Soil and water science research to sustain Illinois' future: Building on a rich history of study and management

- 9:30 Arrival, pick up badge, Coffee and Doughnuts
- 10:00 Welcome and introductions
- 10:15 “Soil Planet: Designing the Smithsonian Exhibition *Dig It! The Secrets of Soil*”
Dr. J. Patrick Megonigal, Lead Curator
- 11:15 Educating Illinois students: the grand proposal for a dedicated soil and water science teaching laboratory and field resource
Dr. Wesley M. Jarrell
- 12-1:00 Lunch and Remarks by Dean Robert A. Easter
- 1:00 Technical Sessions

Oral Presentations

Urban Soils – They’re Where We Live

Dr. Robert A. Darmody

Improving Biodiesel

Dr. Richard A. Larson

Is Continuous Corn Production Good for the Soil?

Dr. Richard L. Mulvaney

Land Use and Carbon Sequestration

Dr. Michelle M. Wander

Managing soil, water, and plant factors to increase crop-nutrient availability

Dr. Fábian G. Fernández

The UIUC Method for Methylmercury Analysis in Natural Water Samples

Dr. Robert J. M. Hudson

- 3:00 Break
- 3:30 Next steps –Panel Discussion on How to Shape Our Programs to Meet Societal Needs.
- 4:00 Tour of current teaching facilities (the view “Before”)

Cosponsored by the Illinois College of ACES Office of the Dean and Office of Research, Department of Natural Resources and Environmental Sciences, the Environmental Change Institute, and the Agroecology and Sustainable Agriculture Program

ISCA/WSPSS/AWSS Joint Fall Field Trip October 15th & 16th, 2008

Location: Illinois Beach Resort and Conference Center, Spring Bluff Forest Preserve, and Lyons Woods Forest Preserve on the boundary of Wisconsin, Illinois and the shore of Lake Michigan, near the towns of Zion and Winthrop Harbor in Lake County, Illinois

Agenda

Wednesday, Oct 15 – Illinois Beach Resort and Conference Center, Conference Room

6:00-7:00 pm – Registration

7:00-8:30 pm – Presentations by:

Jim Miner, Geologist with Illinois State Geological Survey, will discuss the geologic history of post-glacial Lake Chicago, the Zion City moraine and his study of the water table at Spring Bluff.

Don Wilson, Illinois Beach State Park Steward will discuss the natural resources and human impact of the area.

President (or representative) from each professional organization

8:30-? pm – Social time to interact with our fellow soil scientists

Thursday, Oct 16 – Field Tour

8:00 am-1:00 pm – Meet at Spring Bluff Forest Preserve to see soils formed in the ridge and swale deposits of post-glacial Lake Chicago. After a mid-morning break (refreshment provided) test your texturing skills (with prizes for the winners!). Travel by car only a short distance to Lyons Woods Forest Preserve to view till soils of the Zion City moraine.

1:00 pm – Farewell

Registration: Please register by September 15th. Registration fee is \$15.00 payable to Illinois Soil Classifiers Association. Late registration after September 15th or at the door is \$20.00.

Lodging Information: You are responsible for making your own lodging arrangements. A block of 20 rooms has been reserved at the Illinois Beach Resort and Conference Center at the rate of \$89 + tax. <http://www.ilresorts.com>. Call the resort at (847) 625-7300 before September 15th to guarantee a room. Camping facilities are available in the state park. For information about camping go to: <http://dnr.state.il.us/LANDS/LANDMGT/PARKS/R2/ILBEACH.HTM>. Other motels are in nearby Zion and Winthrop Harbor. For more information about other places to stay, go to: http://travel.yahoo.com/p-hotel-4128764-illinois_beach_resort_conference_ctr-i. If you would you like to share a hotel room to cut costs and you don't already have a roommate, let us know and we will compile and distribute a list by September 20th to people on that list only. Maybe you will know someone, maybe not, but it is one night and can save you a few bucks. Mark "Yes" on the registration form if interested.

For more information please contact Mark.Bramstedt@il.usda.gov, (815) 432-3946 x113 or (815) 432-2378, evenings.

Registration Form for October 15 & 16, 2008 ISCA/WSPSS/AWSS Fall Tour

Registration : \$15.00 (\$20.00 if after September 15th)

Name: _____ Affiliation: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (____) _____ Email address: _____

Would you like a list of attendees to share a room? Yes _____

If you are interested in an optional commemorative T-shirt for \$10.00 (earth-tone color with all 3 logos on left chest area), please register before September 15th and indicate size and quantity. XS ___ S ___ M ___ L ___ XL ___ XXL ___ XXXL ___ XXXXL ___ (adult sizes)

Please make the check for \$15 dollars (\$20.00 after September 15th). If ordering the commemorative t-shirt, add \$10.00. Make your check payable to Illinois Soil Classifiers Association. Detach and send the registration form and check to:

Mark Bramstedt, 320 E Locust St., Watseka, IL 60970



ISCA/WSPSS/AWSS Joint Meeting October 15-16, 2008



Not to scale.



www.illinoissoils.org

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Charleston, IL 61920

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Fax: 217-345-7307
Email: zach.weber@il.usda.gov

Submissions

This is **YOUR** newsletter. If you wish to submit material, here are some preferences.

- Send information by the last week of the month before the newsletter is scheduled to be published.
- Digital copy in Microsoft Word
- Use as little formatting (indents, bullets, charts) as possible. This increases the work to get it into Publisher.

Publication Schedule

- Winter (February)
- Spring (May)
- Summer (August)
- Fall (November)



The Illinois Soil Classifiers Association is an organization promoting the wise use of the soil resource. ISCA is made up of professional soil classifiers in public service, private industry, and education and includes students and others interested in preserving soil. A soil classifier maps, describes and interprets soils according to a national system of soil classification. ISCA was established in 1975 and is affiliated with the American Registry of Certified Professionals in Agronomy, Crops, and Soils.

Days Gone By...



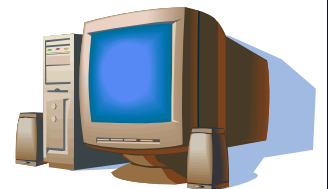
1972 Union County Initial Field Review.
From L-R: Bob Grossman, Mike Kiefer, Louis Dungan, Wiley Scott, Burt Ray
-photo taken by Earl Voss and submitted by Mark Bramstedt



ISCA Newsletter Committee is looking for pictures of it's members, past or present, to include in future newsletters. Submissions can be sent electronically or hard copy to the staff address, see above and left. Please include a narrative for the caption! If hard copies are sent please indicate if they are to be returned otherwise photographs will be retained in an archive photos file.

www.illinoissoils.org

New, exciting links have been added to the "announcements" page on our website. Be sure to bookmark this page. Its an excellent resource to keep you informed on the latest soils issues.
Better yet... make it your home page!



Visit the ISCA website to see the color version of this newsletter

www.illinoissoils.org/news

.....Cut.....Cut.....

Change of Address Form

Name: _____

Address: _____

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Phone: _____

E-Mail: _____

*Mail to: Steve Elmer, ISCA Secretary, 27892 Ebenezer Road, Geneseo, IL 61254



Illinois Soil Classifiers Association Newsletter

Fall-November 2008

Upcoming Events:

2009 Annual Meeting...To Be Announced

Inside this issue:

Membership News	2-4
Bioturbation Pics	4
ISCA/WSPSS/AWSS Joint Fall Field Trip	5-6
DIG IT! Exhibit opens in DC	7-8
Trading Post	8
54th Midwest Friends of the Pleistocene	9-11
52nd Annual ASA Region 3 Soil Judging Contest	12-14
2008 ILICA Show pics	15
Seeking Mentors and Mentees	16
Where Have All the Soils Students Gone?	17-24
Non-Certified Members Dues Notification	25
Days Gone By...	26

Message from the President

Hello to everyone!

At the end of another busy summer I'd like to give a quick reminder from the ISCA Council about sharing information. Although we work in the field of Soil Science, as a group we apply our soils expertise to a variety of fields. Because of this, we may be exposed to many different opportunities to educate people about Soil Science or learn about how Soil Science is used in other fields. Letting others in ISCA know about these opportunities can be helpful to all of us and can help promote Soil Science. For example, the Illinois Association of Local Environmental Health Administrators holds their On-Site Wastewater Treatment Conference every January in Peoria, and the Society of Wetland Scientists is holding their annual meeting in Madison in June of 2009. An email to the ISCA webmaster with the information about these kinds of events will allow all of us who look at the Announcements section of the web page to know about them and attend, if we are interested. To quote a wise man I know, "we are all wiser than any one of us".

Thanks for all of your input,

Scott
Scott Wegman
573-541-7645
ebsoil@marktwain.net

Illinois State Soil T-Shirts Still Available

Short Sleeve -- \$12
Long Sleeve -- \$14
Shipping and Handling \$5 per order
Order by contacting Steve Elmer
E-mail : torflagr@geneseo.net



ISCA Membership News

Obituary-Lester Johnson

Lester Alan Johnson

GALENA, Ill.--Lester Alan Johnson, 54, Galena, Ill., died suddenly Tuesday, Oct. 21, 2008 at his home.

He was born on Sept. 18, 1954 in Peoria, Ill., the son of Delmer and Audrey (Schaefer) Johnson. He married Carmen Ferguson on Sept. 4, 1989 in Grace Episcopal Church in Galena.

He grew up on the family farm in Mapleton, Ill. He received a BS in Forestry from the University of Illinois, Champaign/Urbana, and was certified as a soil scientist by the Illinois Department of Agriculture. He was employed for 28 years as Resource Conservationist for the Jo Daviess County Soil and Water Conservation District, and was a founding member of the Jo Daviess Conservation Foundation. He was an active participant and board member in many associations throughout the county, including the Jo Daviess County Planning Commission, Apple Canyon Lake Association and the Galena Community Garden. He was involved in the restoration and beautification of Recreation Park in Galena and numerous other civic endeavors. He was a keen observer of the weather and made a hobby of studying climate trends. He and Carmen shared a love of growing vegetables and flowers and the gardens and ponds at their home are a showcase of productivity and beauty. He loved to fish and one of his favorite pastimes was to take his pontoon boat out on the Mississippi River and anchor it in the lee of an island, where he and Carmen would throw in a line and enjoy supper at sunset with good friends.



In addition to his beloved wife, Carmen; he is survived by his parents; one brother, John (Irene) Johnson, Los Altos, Calif.; three sisters, Shirley Johnson, San Francisco, Calif., Marilyn (Van Eden) Johnson, Kirkland, Wash., and Carol (Fernando) Ossandon, Urbana; 23 nieces and nephews; and legions of friends, all who will miss him dearly.

His family will receive friends from 2:00-4:00 p.m., Tuesday, Oct. 28 at Grace Episcopal Church, Hill and Prospect Streets in Galena.

Memorial services will be held at 4:00 p.m., Tuesday, Oct. 28, 2008 at the Grace Episcopal Church in Galena, followed by a supper and celebration of Lester's life at Turner Hall, 115 South Bench Street in Galena. Interment of his ashes will be held at a later date.

Memorial gardens are being planned in his honor in Elizabeth and at the Galena Community Garden site.

The Furlong Funeral Chapel of Galena is assisting the family.

Published in the Galena Gazette on 10/24/2008

IN MEMORY OF LESTER JOHNSON

The following contributions made by Lester were compiled by friends and co-workers too numerous to mention. However, special thanks is given to Jerry Misek, retired District Conservationist, Jo Daviess County, who had the honor of giving Lester's eulogy during the celebration of his life on October 28th, in Galena. His comments have been incorporated within.

Lester was known in Jo Daviess County and the surrounding counties for his soils expertise and innovative use of technology to promote the use of soils information. He graciously gave of his time and talents to do what he could to improve life and protect area resources. He was certified by the Illinois Soil Classifiers Association as a Certified Professional Soil Classifier and was noted for his outstanding professionalism.

Lester joined the Jo Daviess county soil survey team right out of college in 1976. He was recognized as intelligent and hard working, and quickly became proficient in soil identification and mapping in this geologically complex area of the state. When the Jo Daviess County Board discontinued the Soil Survey in 1978 (for political reasons) Lester found another way to use his talents in pursuit of his interest in soils. A brief employment with the Apple Canyon Lake Property Owners Association increased his desire to help others understand how knowledge of soil properties can help with over-coming problems associated with urban and rural uses of soil.

By 1980, Soil and Water Conservation Districts in Illinois received authority for funding to hire aides. Lester applied for this position and was hired in Jo Daviess County. The Jo Daviess County Soil Survey was restarted in 1986 but Lester was not free to rejoin the team by then. Lester had become a tireless worker for the Jo Daviess Soil & Water Conservation District, as Resource Conservationist. He did erosion control work, including survey, design, pond construction, natural resource reports, and programs such as fish and tree sales. He helped build the tree sale program into one of the biggest District sales programs in Illinois.

But Lester was witnessing other developments in an office setting shared with USDA personnel. Computers were replacing typewriters and there was talk of expanding their use to resource analysis. Lester was an ardent researcher and always ready to be on the "cutting edge" of technology. Lester quickly became the "go to" guy for questions and problems. When the Jo Daviess County Board became the first county in the nation to order USGS DOQQs for digitizing a soil survey county-wide, the SCS national Cartographic and Information Systems Division proposed a pilot GRASS-GIS project to the local office through state and area office channels. Lester helped write the grant for the hardware and software package which arrived in early 1992. He quickly absorbed the technical assistance the Field Office was receiving from the State office and became directly involved in helping to get the system up and running. The grant also included funds to hire a person to digitize all the field boundaries in the county. Lester spent countless hours training other people to develop and use the system at the local level. He contributed much to the successful implementation of this technology at the field level.

Lester's interest in soil science and geology related aspects found him often working after hours to further understanding wherever possible during his 28 years of service to the Jo Daviess Soil and Water Conservation District. Contributions worthy of special mention include the August 11-12, 2000, ISCA Summer Meeting in Galena, planned around a Field Tour, which included soil classifiers from Iowa and Wisconsin. Lester organized the tour stops and provided interesting views on several classic stops that had been studied in 1971 during a Geological Science Field Trip of the Galena Area. The evening before the trip everyone was treated to an interesting presentation by Lester on his local research on "Grover Gravel". The Grover Gravel is thought by some researchers to be an indication of high level outwash related to glaciations in parts of the so called "driftless area" of Jo Daviess County. Some of this gravel was retrieved by attendees on the field trip the next day and stimulated much discussion across state lines.

Lester was intrigued by ancient glacial lake deposits and maintained a file of sites with documented elevations that he attributed to either Illinois or pre-Illinois age glaciations, 260-262 meters and 290-296 meters, respectively. Lester

assembled his own GPS system that contained near centimeter accuracy that he used in his work with the District as well as issues of soils and geological interest to him. When NRCS was evaluating Electromagnetic Conductivity (EC) equipment for practical use in improving the quality of Soil Surveys in detailed Order 1 Surveys, Lester heard that one of the SOILS Project study pits at the site on IL US 26 north of Freeport uncovered lake bed deposits midway up a ridge at the east end of the site. Lester rushed to the site to document the elevation near the bottom of the pit. He later sent a file labeled "Interpretations on Stephenson Lakebed Geolsols", in which he commented that, "our little survey showed that the gray silty layer on the knoll was at 264.6 meters", virtually the same as a site he documented to the north which he attributed to an Illinois age lakebed.

Lester unselfishly contributed his time and talents to the betterment of all. He will be truly missed by all who knew him.

-submitted by Steve Zwicker

Earthworms...Not Just For Fishing

The following photos are submitted by Joel Gruver from a soil pit presentation in Southern Wisconsin. The photos are from the edge of a second year alfalfa field (corn alfalfa rotation) and show bioturbation from earthworms. The field was originally mapped as a Tell Silt Loam. The underlying sandy horizons were riddled with earthworm burrows - many of which contained old and new alfalfa roots. Some of the roots following worm burrows had nodules at 2-3'.



ISCA/WSPSS/AWSS Joint Fall Field Trip Is Huge Success!

This year's fall tour was held near the towns of Zion and Winthrop Harbor in Lake County, northeastern Illinois, on October 15th and 16th. The field trip was a joint sponsorship between the Illinois Soil Classifiers Association, Wisconsin Society of Professional Soil Scientists, and the Association of Women Soil Scientists. The tour was very informative, well organized, and well attended.

The meeting Wednesday night was moderated by Illinois State Soil Scientist, Bob McLeese, leading as Master of Ceremonies. Illinois State Geological Survey Geologist, Jim Miner, began the evening with an excellent presentation on the geology of the area. He spoke on the geological formation of Lake Michigan, historical lake levels, ridge and swale formation at Illinois Beach State Park, and the littoral transport process "then and now". Following was another great presentation from Don Wilson, Illinois Beach State Park Steward. Don spoke on the natural resources and the human impact of the area. The unique ridge and swale formation provides perfect conditions where many rare and endangered plant and animal species are currently thriving. A representative from each of the sponsoring organizations addressed the audience with highlights of the organization to which they belonged. Mark Bramstedt, ISCA Public Relations and Education Committee Chair, then gave a quick overview for the following day. The evening ended with a bonfire around which all attending had a chance to mingle, enjoy some camaraderie with fellow soil scientists, and sample some of that famous Wisconsin cheese!

The first stop on Thursday was at the Spring Bluff Forest Preserve. Here attendees were able to view soils formed in the ridge and swale deposits of post-glacial Lake Chicago. Soils observed at this location were the Antung, Granby, Plainfield, and Watseka series. In addition to soils discussion, representatives from the forest preserves gave insight on some of the management practices being utilized to promote native vegetation, i.e. controlled burns.

The second stop of the day was at the Lyons Woods Forest Preserve. Attendees were able to get some refreshments in order to prepare them for the texturing contest that was to ensue. Texture contest winners were Jim Barnes for 1st place, Robert Oja for 2nd place, and Lester Bushue for 3rd place. At this stop attendees were able to view soils formed in glacial till of the Zion City moraine. Soils observed were the Beecher and Ozaukee series.

Thanks go out to all those who helped make this meeting a success, there are too many to name individually. A special recognition goes out to Roger Windhorn and Mark Bramstedt for all their extra work to make this a successful trip for all.

-submitted by Troy Fehrenbacher



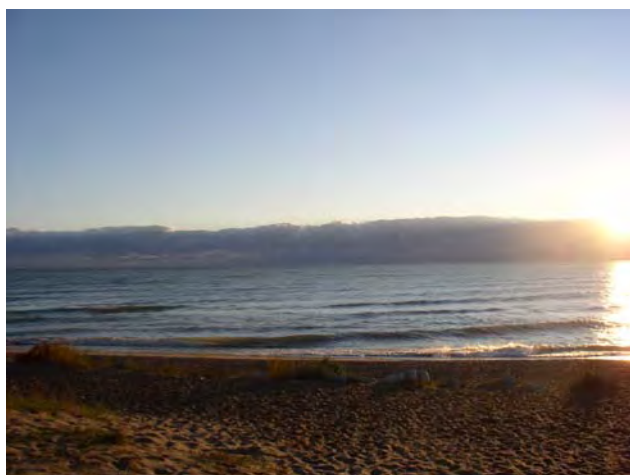
Group photo at Lyons Woods Forest Preserve.



Ron Collman digs a pit at Lyons Woods Forest Preserve as fellow soil scientists Karla Petges, Mark Bramstedt, Zach Weber, and Dale Cal-syn discuss soil material being excavated.



Fellow scientists enjoying a beautiful night around the bonfire.



Sunrise over Lake Michigan at the Illinois Beach Resort and Conference Center.



Mark Bramstedt and Roger Windhorn give some background information on the soils that will be seen in the dune and swale formations.



Roger Windhorn talks about the Plainfield soils that formed in the dune and swale formation.



Karla Petges talks about the Ozaukee soils that formed in glacial till of the Zion City moraine.

DIG IT! The Secrets of Soil exhibit opens



After many years of hard work by numerous individuals and organizations, the Smithsonian soil exhibit officially opened to the public on Saturday, July 19, 2008. I was fortunate enough to attend the unveiling of the exhibit with my family on the Thursday evening prior to the general opening. The evening started with speakers from SSSA, NRCS, and the Smithsonian thanking all the volunteers and giving an overview of the exhibit. After the speakers, the exhibit room was opened and several hundred of us in attendance that evening were able to view the exhibit. We returned to the museum on Saturday and I was amazed at the number of people viewing the exhibit and the number of hands-on activities that children were participating in. I overheard numerous people marvel at the differences in the soil monoliths and how they never thought about soil as being so important before. A particular favorite of many was finding their state soil monolith and then viewing the interactive displays for their home state.

The approximately 5000 square foot exhibit is located on the second floor of the museum and opens into the central Rotunda. There are six primary components to the exhibit: The Skin of the Earth; Sizing up Soils; Matters of Life and Death; The Big Picture; What's Soil got to do with it; and Our World our Soil. Most impressive to me

was the collection of 54 monoliths from each U.S. state and territory. Drummer is the first soil you see as you enter the *Sizing up Soils* portion of the exhibit.

I was particularly impressed with the quality of the exhibit, scientific accuracy, and the many interactive stations for both children and adults to utilize. The Smithsonian display team is to be commended. There were stations where children could use different colored soil to paint objects and also a mini-monolith station where children were able to assemble a soil profile. There were numerous computer stations set up with interviews of soil scientists and others interested in the soil resource. There was also an interactive station where people could learn about their state soil. All aspects of soil science were presented and the exhibit display team did an excellent job emphasizing the importance of soils in an individual's daily life and in global topics.





DIG IT will be housed in the Smithsonian until January of 2010 and will then travel around the country to other museums. To learn more about the many aspects of the exhibit, please visit the Smithsonian's website at <http://forces.si.edu/soils/>.

Thanks again to everyone involved in sending Drummer to Washington! We have done a great service to our profession and now have the chance to let millions of people know what soil is and why soils are important. I would strongly encourage everyone to visit. Again, I am very impressed with the exhibit and very proud to be a Soil Scientist as all of you should be.

Mike Konen

SSSA Illinois Smithsonian Liaison and ISCA Smithsonian committee member

TRADING POST

This spot is reserved for members who would like to buy, sell, trade, or announce an item, event, or activity in our newsletter. Please limit your classified ad to 25 words or less. Email your ad to the newsletter at zach.weber@il.usda.gov

- ISCA ball caps available for \$9 (includes S&H).
Contact Steve Elmer at torflagr@geneseo.net
- Drummer T-Shirts available in 2 colors (see front cover).
Short sleeve - \$12 Long sleeve - \$14

54th Midwest Friends of the Pleistocene (MFOP) Field Conference

The conference, sponsored by the Illinois State Geological Survey with the assistance of Northern Illinois University, the Illinois State Museum, and the University of Illinois-Chicago, was held on 16-18 May 2008 in DeKalb, Illinois. The conference was titled "Deglacial History and Paleoenvironments of Northeastern Illinois" and featured nine sites illustrative of this topic. This well-organized conference was led by Brandon Curry of the Illinois State Geological Survey (ISGS) and was attended by over eighty-five earth and life scientists active in public and private sectors.

As stated in the conference guidebook, the field tour stops and ensuing discussions served to focus on the deglacial history of northeastern Illinois in the course of examining key glacial landforms, sediments, and fossils. This region has a rich history of research in glacial sedimentology and stratigraphy. Of equal importance is how the ISGS, with the cooperation of scientists in related disciplines and funding by state, regional, and local units of government, have applied this research to issues such as water supply and quality, construction materials, wetlands, landfill siting, and climate change. These issues are critical in this region because it is one of the fastest growing in the nation and experiencing remarkable changes in land use.

Prior to this trip, I attended my one and only MFOP trip almost 30 years ago. How the logistical resources and technology have changed! Conference participants were transported in relative comfort in coach busses. Each bus was equipped with a number of television monitors showing shaded relief maps integrated with a global positioning system receiver that tracked the bus location in real-time. No worries about fuel or getting lost. Bus transport also provided additional opportunities to interact with your fellow passengers between stops without the distraction of driving.

Rather than provide a blow-by-blow description of each of the tour stops (you would be best served by purchasing the guidebook from the ISGS), I'd like to highlight aspects of selected stops that may be of interest to soil classifiers. The discussion that follows for the selected stops is based upon information in the guidebook and give-and-take with other scientists at each stop.

Stop 2 featured the Wedron Quarry. Those who first became familiar with the glacial deposits and stratigraphy of northern Illinois courtesy of Willman and Frey's 1970 publication "Pleistocene Stratigraphy of Illinois" will remember this quarry includes exposures of many of the deposits of the early and middle Wisconsin Episode. This stop allowed one to review the chronologic sequence of deposits early in the tour. It also provided an opportunity to compare and contrast these sediments from freshly excavated and benched exposures.

Stop 4 featured a breach of a morainic dam and subsequent formation of a discharge channel near Oswego. This channel currently contains Morgan Creek. The Oswego Channel is one of several channels that breached the Marseilles morainic system and contributed to the drainage of Glacial Lake Wauponsee. Lake Wauponsee was a proglacial lake formed by the "looping" moraines built by ice of the Peoria and Decatur sublobes. Evidence was presented suggesting that these channels formed contemporaneously and perhaps initially by subglacial drainage during the building of the moraine. During subsequent deglaciation, these low spots on the moraine were breached, forming channels that drained Lake Wauponsee. What made this stop particularly relevant was the fact that ISCA member Bruce Putman had conducted detailed soil mapping investigations on a site that included part of the channel bottom and adjacent sideslope. During the course of these investigations, Bruce noted redoximorphic features at shallow depth in the sloping soils notably higher than the channel bottom. These features appear relict. Could these features be related to the processes involved in the formation of the discharge channel and the transport glacial meltwater? Are these features relict from pre-European settlement prior to drainage and agriculture?

The Farmdale-Sangamon Geosol complex was featured at Stop 6 in fresh exposures at the LaFarge Pit near Elburn. These paleosols formed during the interglacial period between the Wisconsin and Illinois episodes. These soils are quite extensive beyond the limits of Wisconsin glaciation where the landscape is preserved and buried by Wisconsin episode loess. ISCA members Leon Follmer and Mike Konen led the discussion at this stop. They noted that this site is significant because it is among the most northerly examples of this complex. It was certainly something that those of us working in the Chicago area were surprised to see. Almost all of the detailed soil mapping and other onsite investigations involve examining Wisconsin-age sediments and interpreting their properties. On those rare occasions where underlying older sediments are encountered or exposed, any Sangamon interglacial soil development is absent, having been eroded or truncated by Wisconsin Episode glaciation.

Stop 7 highlighted the highly-symmetrical, circular to elliptical, flat-topped hills that occur throughout DeKalb and Kane counties. These subtle features range from less than 100 to over 30,000 feet across. Many of these hills are closely spaced. In places, one or more satellite mounds overlap the flank of a larger mound. These hills were named the DeKalb Mounds, and were believed to have formed as a result of sediment infilling of melting protrusions of permafrost (pingoes) caused by deep, upwelling groundwater. ISCA member Mike Konen and other researchers presented an alternative genesis. Sedimentological and plant and animal fossil evidence now suggest that these features were shallow, ice-walled lakes. In addition, the fossil species collected from the lake sediments indicate that precipitation rather than meltwater was the likely source of water. The mounds are quite evident on aerial photographs. However, I was quite impressed with how these (and other) features appear on shaded relief maps of LiDAR data. LiDAR (Light Detection and Ranging) is an optical remote sensing technology that uses laser pulses to measure distance. It is similar to radar which uses radio waves. Experts in both technologies believe that light waves are better suited for imaging non-metallic objects such as rocks and soil landscapes. LiDAR is currently used in a variety of applications including detecting faults and measuring uplift, monitoring glaciers, constructing topographic maps, and music videos that employ real-time, 3-D laser scanning.

Stop 8 at the Spring Lake Sand and Gravel Pit featured glaciotectonic deformation. At this location, the sediments (Henry Formation sand and gravel deposits) exhibit folding and faulting as a result of deformation by overlying moving ice sheets (carrying Haeger Member sandy loam diamicton). Deformation features at this location were three-dimensionally mapped to better understand the relationships between paleo-iceflow direction and sediment deformation. These features are visually striking when viewed up-close. This stop generated a fair amount of discussion among the soil classifiers who have worked in this area. Over the last 15 years, this part of McHenry County has experienced phenomenal growth. Those of us who have conducted detailed soil mapping and onsite investigations for wastewater disposal in this area have been confounded by the variability of these deposits when examined from pits or core samples along a transect. To see these features in exposures hundreds of feet in length will help us make cartographic sense of the soils in this area.

Submitted by Bill Kreznor, CPSC



Conference attendees gather for a group photo at the LaFarge Pit. (photo by David Voorhees)



Earth scientists examine sediments at the Wedron Quarry.



ISCA Honorary member Leon Follmer discusses the finer points of the Sangamon Geosol at the LaFarge Pit.



ISCA member Doug Gaines examines sediment deformation features in the Spring Lake Sand and Gravel Pit.



ISCA member Mike Konen describes his research on the formation of the DeKalb Mounds.



Glaciotectionic folding of glacial outwash sediments at the Spring Lake Sand and Gravel Pit.

52nd Annual ASA Region 3 Soil Judging Contest

The 52nd Annual ASA Region 3 Soil Judging Contest took place at Treehaven Field Station near Tomahawk, Wisconsin on October 3 and 4. The contest was hosted by the University of Wisconsin-Stevens Point. Thirty-eight individuals from six teams (Illinois State University, Northern Illinois University, Purdue University, University of Illinois, University of Wisconsin-Platteville, and University of Wisconsin-Stevens Point) participated in the contest. Fifteen students represented the three Illinois Universities.

The contest was organized by Dr. Ron Hensler (UW-SP) with Phil Meyer (NRCS – Appleton) and Tim Miland (NRCS – Eau Claire) serving as the official judges. The Thursday evening before the contest, Dr. Samantha Kaplan of UW-SP gave a presentation on “Northern Wisconsin’s Glacial Legacy: Hummocks, Hemlocks, and a Whole lot of Sand”. She is correct; there is a whole lot of sand in the area!

Six practice pits were available during the week. The soils were Haplorthods and Glossudalfs developed in outwash, glaciolacustrine deposits, till, and/or thin loess. The beautiful contrasting albic and spodic horizon colors were a nice compliment to the fall color of the Northwoods which we were very fortunate to catch its peak. For the most part the weather was fine but yes to all you past judges, as is customary, we did get wet during the week.

The contest consisted of two team judged pits on Friday afternoon and four individually judged pits Saturday morning. The contest pits contained Haplorthods and a Udipsamment.



Haplorthod



Students describing a Haplorthod in a practice pit.

Overall team scores.

School	Score
Purdue University	2994
UW-Platteville	2975
Northern Illinois University	2948
UW-Stevens Point	2848
University of Illinois	2843
Illinois State University	1229

Group judging scores.

School	Score
Northern Illinois University	511
University of Illinois	475
UW-Platteville	474
Illinois State University	445
Purdue University	437
UW-Stevens Point	414

Top 5 individual scores.

Student	School	Score
Jeannie Ross	Purdue University	873
Drew Nesemeier	UW-Platteville	857
Cody Fink	Purdue University	853
Andrea Rasmussen	Northern Illinois University	851
Jason Barrick	UW-Stevens Point	846



Northern Illinois University Soil Judging Team observing northern Wisconsin Histosols.

The top three teams are eligible to participate in the national contest that will be hosted by Southwest Missouri State University in early April of 2009. The highest scoring Illinois individual and winner of the Burton W. Ray Scholarship Award this year is Andrea Rasmussen from Northern Illinois University. The 2009 Region 3 contest will be hosted by Purdue University.



Andrea Rasmussen, Northern Illinois University. Winner of the Burton W. Ray Scholarship Award.

I think I can speak for everyone involved in thanking our hosts for all their hard work and hospitality and as usual everyone learned a great deal about soils, landscapes, hydrology, vegetation, and land-use and had fun while participating in the contest. I think back to my undergraduate days at Iowa State University and know that if it was not for the opportunity to participate in Soil Judging I would most likely not have ended up becoming a Pedologist and having the privilege in continuing to participate in this important educational field experience.

Thanks to all of you that have supported and continue to support Soil Judging,
Mike Konen, Coach of the Northern Illinois University Soil Judging Team

ISCA Displays Soil Pit at the 2008 ILICA Show



Roger Windhorn and Jim Hornickle prepare the soil pit.



Rick Francen and Jim Hornickle add the finishing touches to the soil pit.



Job well done!



James Johnsons and Bob McLeese man the soil pit.



Bob McLeese talks to show attendees during the tour.

Seeking Mentors and Mentees

It was brought up at the last ISCA meeting and it has been on the minds of many; How will we maintain the corporate knowledge of our discipline? Where have all the Soil Scientists gone? We must develop a mentoring program to provide a bridge to tomorrow.

Soil Science is very much alive and the proof lies in the busy schedules of our certified members. The only way we have to keep soil scientists involved in soil science is to build up the foundation of the discipline and strengthen the working knowledge of our members.

Mentoring is one method by which we can accomplish the ISCA mission of establishing and maintaining high standards of technical competence and ethical conduct in the profession of soil classifying, promoting high standards of education in soil science, and promoting the wise utilization and conservation of the soil resources of Illinois by encouraging the use of soils information in land use planning.

The purpose would be to provide younger or transitioning professionals the opportunity to work with Full and/or Certified members and gain experience that is difficult to obtain otherwise. If you are interested in a mentoring program, either being a mentor or mentee, we can set up a committee and develop a list of those who are prepared to be mentors. This is something that is necessary if we are to maintain a fraction of the experience based knowledge that is available.

If you are interested in being a Mentor or Mentee, please contact President-elect Tom D'Avello at Tom.Davello@il.usda.gov or 2118 W Park Ct. Champaign, IL 61821



Where Have All the Soils Students Gone?

Mary E. Collins*

ABSTRACT Where have all the soils students gone? Several articles have been published recently discussing the decline in undergraduate student enrollment in soil science. Those who work directly with these students have known that this trend has existed for many years. At first we thought this trend was temporary. Now we realize that this declining trend is real. The trend is national and international in scope. In the United States the National Academy of Sciences through the National Committee for Soil Science was interested in learning more about undergraduate programs and formed a subcommittee to study the declining enrollment of students interested in soil science. The results of the subcommittee's work and other national and international commentaries on this subject lead to this article. Therefore, the article has the following objectives: (1) to present the information obtained by the subcommittee on undergraduate education of soil scientists, (2) to state the perception of soil science, (3) to discuss how the lack of undergraduate students in soil science affects the quality of graduate students, (4) to offer possible ways to increase the enrollment of students in our courses and as majors, and (5) to question the future of our science. This downward trend has a domino effect. With few undergraduate students, graduate students are coming from other disciplines without the foundation soils courses; soil science departments are being eliminated or combined, thus losing identity; employees are not given the title of soil scientist so the public does see this discipline as potential employment; and statistically, the majority of soil scientists are "mature" (>50 years old).

The title "Where Have All the Soil Students Gone?" was paraphrased from the Pete Seeger¹ song "Where Have All the Flowers Gone?"

Where have all the flowers gone?

Long time passing

Where have all the flowers gone?

Long time ago

Where have all the flowers gone?

Girls have picked them every one

When will they ever learn?

When will they ever learn?

Several articles have been published recently concerning the future of soil science in the United States and abroad (Hartemink et al., 2008; Hansen et al., 2007; Baveye et al., 2006). These concerns have also been discussed by the National Academy of Sciences (NAS)-National Committee for Soil Science (NCSS).

In 1998 the NAS established the NCSS. This was a giant step for soil science because the NAS recognized soil science as a distinctive discipline. The discussion on undergraduate soil science education began from a debate on soil science graduate students. The committee engaged in conversation about the lack of preparedness the graduate stu-

dents were exhibiting in their chosen science. A comment was made that most graduate students do not receive their undergraduate degree in soil science. Thus, many graduate students lacked the fundamental coursework common to undergraduate programs.

So, why are so many graduate students not coming from the undergraduate programs? The attention was then placed on the status of undergraduate programs in the United States. One answer is we are attracting students from other disciplines. The other answer is that we do not have many undergraduate students majoring in soil science. So the question was raised: Why don't we have students interested in our science? To answer this question the NCSS formed a subcommittee named "National Trends in Undergraduate Soil Science Education" in 2003 to investigate this concern.

The function of the subcommittee was "to develop recommendations which will enhance the number and quality of students enrolling in soil science as a major." Members of the subcommittee represented, as nearly as possible, the various areas of soil science that have an interest in undergraduate education. Therefore, the members were selected to represent 1862 and 1890 land-grant universities, non-land-grant universities, the private and public sectors, as well as representation from across the United States.

The subcommittee reviewed enrollments across the

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Abbreviations: ASA, American Society of Agronomy; CALS, College of Agricultural and Life Sciences; CSREES, Cooperative State Research, Education, and Extension Service; NAS, National Academy of Sciences; FFA, Future Farmers of America; NCSS, National Committee for Soil Science; SLO, San Luis Obispo; SSSA, Soil Science Society of America; SWS, Soil and Water Science; UF, University of Florida.

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country and perception of the major to determine the potential to increase numbers, and the near future of the major. Discussions centered on the core curriculum, number of students taking the courses, and is there a need for the major and if so how to increase interest in the major. For the most part the subcommittee determined the declining trend in soil science majors is a national issue. This article is a summary of their specific findings as well as what is occurring with the soil science major nationally and internationally.

Preparedness of Soil Science Graduate Students

The discussion of the NCSS subcommittee on undergraduate programs began with a concern about the preparedness of soil science graduate students. Many of us who received our advanced degrees in soil science also received our Bachelor's degree in that major or a closely associated one (e.g., agronomy with an emphasis on soils). Today, graduate students are coming to us with various undergraduate backgrounds. The students received their undergraduate degrees in sociology, political science, and English. These students are not majoring in science-oriented disciplines. Other students come from, for example, chemistry, biology, and geology backgrounds. All of these graduate students have one thing in common. They lack the extensive and intensive undergraduate coursework in soil science. This is not to say that these individuals are not outstanding students. It is that they do not have the fundamental educational background in soils common at the undergraduate level. In the past, graduate schools allowed graduate students to take undergraduate classes and get graduate credits for them. This is no longer true. Therefore, some universities have created undergraduate/graduate "combined" courses to meet the needs of these graduate students.

The combined courses are taught together; same time in the same classroom. In some of the soils courses taught this way, the graduate students may have different exams and/or a term project. The point is that the graduate students are being taught the same information as the undergraduate students, but getting graduate credit for it. Some students ask, "Are the undergraduates getting a graduate education or are the graduate students getting an undergraduate education?" In either case, the students' perception is that no one is getting taught at their level.

The result is that the graduate student is obtaining graduate credit, but is not getting a graduate education. Trying to "catch-up" at the graduate-level is very difficult to do. What is more disturbing is that these students may graduate with an advanced degree, never having taken an "advance course" in soil science. Is this the future of soil science? As it looks now, yes. Since we have so few undergraduate students across the country majoring in soil science, the graduate students have become the backbone of our science. But are they truly prepared?

Can you imagine a Ph.D. student with no background in soils (B.S. and M.S. degree in some other area) who finishes his/her degree program with very few "soils" courses?

This can happen and has happened. It is up to the student and his/her Ph.D. committee to select which courses will be taken. Thus, no specific courses are required for a Ph.D. degree. In theory, students could take courses in numerous departments without taking a course in soil science. This is especially true when soil science went from an agricultural to environmental emphasis. Thus, as Lal (2007) stated, "... graduate programs in soil science were further marginalized by the creation of multidisciplinary environmental science graduate programs..."

Perception of the Major

Soil science, as an area in which a student can major, is not on today's high school and college-age students' radar screen. The major is associated with "agriculture," where it resides at many universities. At the University of Florida (UF), a survey ($n = 2164$ responding) was completed asking incoming freshman and transfer students how they made a decision on what to major in (Rocca and Washburn, unpublished data, 2004). The vast majority (70%) of the responses indicated that they used the degree program information on the website as the main source of information. Another question asked was, "As you think about your intended major, how influential were the following factors when making your decision regarding which university to attend?" Ranked number one by the respondents was "career opportunities available"; the last one ranked was "number of students in major."

Another challenge we face in the perception of the major is the fact that many parents make the decision for their child on what to major in. This is based on what they, the parents, majored in when they went to college. Universities—and especially what is offered to specialize in—have changed tremendously since the parents attended college. Luckily, these students, after they have been in school for a semester and away from their parents, realize that today's universities offer many more choices. It is at this time the student changes his/her major.

Trying to change the perception of soil science is very difficult to do. Even within the soil science community we are raising questions as to what clientele we serve. Soil science colleagues within departments may be split between "agricultural" and "environmental" issues. So, the question is how do we change or correct the perception the public has about soil science when we have different interpretations of the science?

The perception is evident when we visit the names of departments and majors across the country (Table 1). Names are quite diverse. The University of Wisconsin still has the name Department of Soil Science, whereas at the University of California-Davis soil science is in the Department of Land, Air, and Water Resources. Finding the soil science major is even more difficult because of the various names it is given. Several of the major land-grant universities (e.g., Cornell University, Iowa State University, and University of Illinois) do not offer a major but a concentration/specialization/track in soil science.

Table 1. Various names of selected departments/schools with "soil science" curriculum.

University	Department/school name	Major	Concentration/specialization/track
Arizona	Soil, Water, and Environmental Science	environmental science	soil science
Auburn	Agronomy and Soils	agronomy and soils	
UC Davis	Land, Air, and Water Resources	soil and water science	
UC Riverside	Environmental Science	environmental science	environmental science–soil science
Colorado State	Soil and Crop Sciences		environmental soil science
Cornell	Crop and Soil Sciences	science of natural and environmental systems	physical science (soil, air, and water)
Florida	Soil and Water Science	soil and water science	
Iowa State	Agronomy		soil and environmental science
Illinois	Natural Resources and Environment Sciences	natural resources and environment science	soil and water science
Kansas State	Agronomy	soil and environmental science	
Maryland	Environmental Science and Technology Program		soil and watershed science
New Mexico State	Plant and Environmental Sciences	soil science	
Ohio State	Environment and Natural Resources	environmental science	soil science
Oklahoma State	Plant and Soil Sciences	plant and soil science	
Oregon State	Crop and Soil Science	soil resource management	
Purdue	Agronomy	environmental soil science	
Virginia Tech	Crop and Soil Environmental Sciences	crop and soil environmental science	soil–environmental sciences
Washington State	Crop and Soil Sciences	soil science	environmental soil science
Wisconsin	Soil Science	soil science	

Potential to Increase Numbers

The need to increase the number of students majoring in soil science was first discussed by Taskey (1994) when California Polytechnic State University, San Luis Obispo (SLO) (non-land-grant university) Soil Science Program and Department were challenged to change. In the late 1980s, SLO experienced a severe decline in enrollment and the program was chosen for potential removal. The elimination of the undergraduate program also raised administrative questions as to the need for the Soil Science Department. The faculty responded by creating a new program with existing resources and the enrollment increased from a low of 44 to 120 students within 2 years.

How can other universities increase the number of students interested in majoring in soil science? There are three general sources to recruit; high school students, transfer students, and on-campus students. I will begin the discussion with recruiting students who are already on campus.

On-campus students may have already declared a major or designated themselves an "undecided" student. How can we grab these students' attention? One of the best recruiting tools we have is the introductory course in soils. This course normally has a high enrollment of students and usually is taught every semester.

At the University of Florida, Soils in the Environment (SOS 3022) is the introductory soils course. It is taught every fall and spring semester and every odd-year summer semester. The enrollment in this course is limited by size of classroom assigned. Spring semester enrollment is usually larger than fall semester, because a larger classroom is available. Spring semester 2008 had the largest enrollment ever for this class (158 students). The students ranged from freshman to graduate students and represented 37

majors from 10 colleges (Table 2). The 2007 Heisman Trophy winner even took the class. The first course can capture the students' interest in soils at an early stage in their college career. It may and hopefully inspires students to change majors or at least to take additional soil courses.

Other courses offered need to be addressed. The enrollments for selected soil courses at UF are presented in Fig. 1–3. It is readily evident that SOS 3022 has a large enrollment (Fig. 1), but what about the other courses. How "popular" are they? Why do some soils courses have much higher enrollments than others?

To explain one of the reasons why, we will have to go back to 1991 when my department changed its name from Soil Science Department to Soil and Water Science (SWS) Department. The faculty felt that a name change better reflected our mission, but our course offerings did not change. Up until a few years ago we did not have any "water" courses. Now we have several: World of Water (SOS 2007), Wetlands (SOS 4244), Water Resource Sustainability (SOS 4245), Hydric Soils (SOS 4942), and Ecology of Waterborne Pathogens (SOS 4307). World of Water has only been taught since 2005, but its popularity/enrollment has grown from 12 to 180 students (Fig. 4). Wetlands has always been a popular course, averaging 35 students. Hydric Soils has reached its cap enrollment every time offered. The popularity of water courses is ever-increasing. This may be the result of the public's interest in water issues including the quality and quantity of drinking water, the newness of this area, and the instructors' passion to teach.

As a result of attention in water, a "water science" specialization is being established at UF. This was a result of the USDA-CSREES (Cooperative State Research, Education, and Extension Service) review of the SWS department

Table 2. List of majors/specializations and colleges/schools of students who have taken the introductory soils course (spring semester 2008).

Major/specializations	College/school
Agriculture and Biological Engineering	Agricultural and Life Sciences
Agriculture Education and Communication	Agricultural and Life Sciences
Agriculture Operations Management	Agricultural and Life Sciences
Anthropology	Liberal Arts and Sciences
Biology	Agricultural and Life Sciences
Chemical Engineering	Engineering
Chemistry	Liberal Arts and Sciences
Criminology, Law, and Society	Liberal Arts and Sciences
Education	Education
Entomology	Agricultural and Life Sciences
Environmental Horticulture	Agricultural and Life Sciences
Environmental Engineering	Engineering
Environmental Science	Natural Resources and Environment
Family Youth and Community Sciences	Agricultural and Life Sciences
Food and Resource Economics	Agricultural and Life Sciences
Food Science and Human Nutrition	Agricultural and Life Sciences
Forestry and Resource Conservation	Forest Resource and Conservation
Geography	Liberal Arts and Sciences
Geological Sciences	Liberal Arts and Sciences
Horticultural Science	Agricultural and Life Sciences
History	Liberal Arts and Sciences
Independent Studies	Agricultural and Life Sciences
Journalism	Journalism and Mass Communication
Landscape and Nursery Horticulture	Agricultural and Life Sciences
Management	Business Administration
Microbiology and Cell Science	Agricultural and Life Sciences
Music	Fine Arts
Natural Resource Conservation	Forest Resource and Conservation
Plant Science	Agricultural and Life Sciences
Political Science	Liberal Arts and Sciences
Psychology	Liberal Arts and Sciences
Public Relations	Journalism and Mass Communication
Sociology	Liberal Arts and Sciences
Soil and Water Science	Agricultural and Life Sciences
Sports Management	Health and Human Performance
Undergraduate Studies	Liberal Arts and Sciences
Wildlife Ecology and Conservation	Agricultural and Life Sciences

in April 2007 (O'Connor and Reddy, unpublished report, 2007). The water science specialization will emphasize water management, policies, and resources. If this specialization is successful, we may increase the number of students. But not the number of soil science majors.

A colleague of mine asked me if I still teach cation exchange capacity in SOS 3022. My reply was "yes," and his response was "the problem with soils courses is that they are still being taught the way they were 50 years ago!" How true. Maybe that is why the number of students in the other courses such as Soil and Water Chemistry (SOS 4451), Soil Physics (SOS 4606), Environmental Pedology

(SOS 4715), and Soil Microbial Ecology (SOS 4303) have been historically low (Fig. 2 and 3). As shown in Fig. 2, Environmental Quality has higher enrollment than Environmental Pedology. Environmental Pedology is taken primarily by undergraduate students in SWS whereas Environmental Quality includes mostly non-SWS students. Thus, have we remained too static, too "traditional" in what we offer? How do we increase curiosity?

With the world and technology changing rapidly, we need to evaluate every 5 years the courses we offer to determine if the objectives taught are still essential. How can we transform today's courses to make them more appealing for today's students? For example, the soil physics course could be changed to Water Movement in the Environment, pedology could be renamed Distribution, Identification, and Assessment of Soils, and soil microbiology to The Living Soil. But changing the title is only part of the answer. Course content needs to be modernized. Also, new courses dealing with today's needs should also be created. How about teaching courses such as Soil Biology (not just microbiology), Soil Ecology, Soil Sustainability, Soils and Public Health, or Soils of the World to name a few? But as Smiles et al. (2000) stated while discussing the situation, "...in Australia, no school of soil science is big enough to offer a reasonable spectrum of skills required..." As the number of soil science faculties shrink in the United States, how can we offer new soils courses?

One approach in which new courses could be offered is through distance education. A new undergraduate soils course, Forest and Soil Ecosystem Services, is being taught for the first time in the fall of 2008. This web-based, nontraditional soils course is being taught at seven universities (four in the United States and three in Brazil). It includes subjects such as "Spiritualism and Aesthetics as Forest and Soil Ecosystems" in which scenic landscapes, recreation, ecotourism, and religious connections to the forest (e.g., Native Americans) will be covered.

Other tools that can be used to recruit students on and off campus include a combined (B.S./M.S.) degree program, preprofessional tracks/specializations, and a minor in education. Outstanding undergraduates can apply for the combined degree in which they can receive both undergraduate and graduate credits for specific classes. They can transfer up to 12 credit hours to their M.S. programs. In theory, these students should earn their M.S. degrees in 1 year.

At recruiting opportunities, I tell students that they can major in soils and prepare for professional schools (e.g., law school or medical school). At this time, we have a two

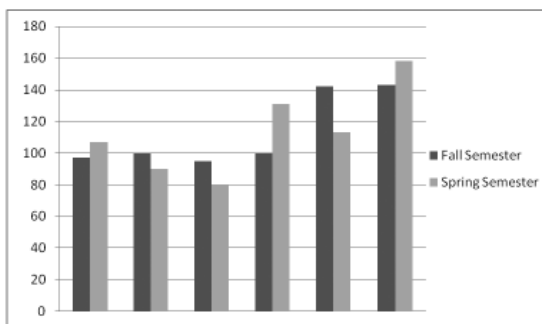


Fig. 1. Enrollment for Soils in the Environment (SOS 3022) course from 2003 to 2008. This is the introductory soils course taught on campus at the University of Florida. Enrollment is limited by the size of the classroom assigned.

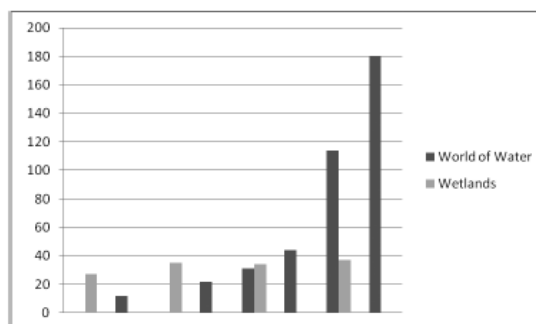


Fig. 4. Number of students in World of Water and Wetlands courses (2005–2008) at the University of Florida. World of Water is taught fall and spring semesters whereas Wetlands is taught spring semester. Enrollment is limited by the size of the classroom.

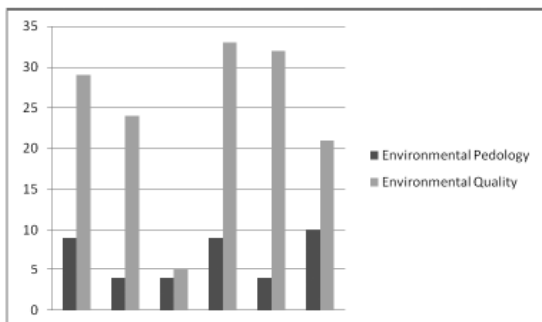


Fig. 2. Number of students enrolled in the Environmental Pedology and Environmental Quality undergraduate soils courses taught spring semesters (2003–2008) at the University of Florida.

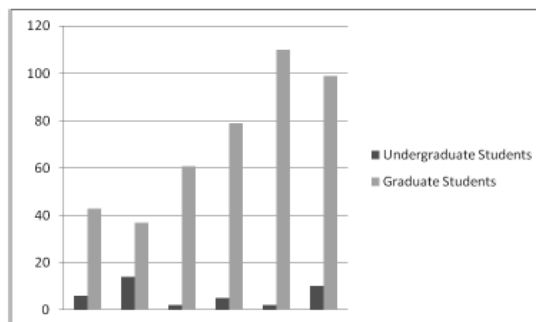


Fig. 5. Number of undergraduate and graduate students from 1998 to 2008 in the Soil and Water Science Department, University of Florida. Reference <http://cals.ifas.ufl.edu/cir/>.

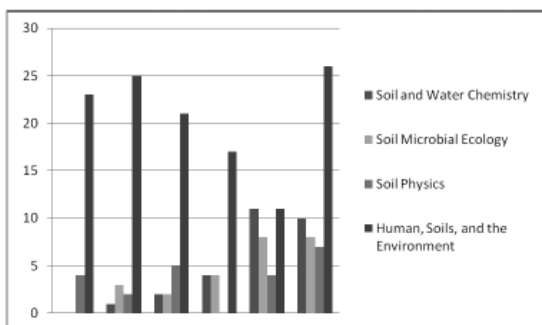


Fig. 3. Number of students enrolled in undergraduate soils courses taught fall semesters (2003–2008) at the University of Florida. In fall 2003, no undergraduate students enrolled in Soil and Water Chemistry and Soil Microbial Ecology. In fall 2006, no undergraduate students were registered in Soil Physics.

articles

soils students who have expressed interest in pre-med. This recruiting tool is critical, because many students believe that the only way to get accepted to a professional school is to major in biology, microbiology, chemistry, animal science, and so forth. It is difficult to convince students (and parents) that they can major in any discipline and still be accepted to a professional school (with the proper electives). Another recruiting tool is the new minor in education through the UF College of Education. Upon graduating with this 18-credit hour minor, the student would be eligible for a temporary Florida teaching certificate and qualified to become an instructor of high school science.

One concern students (and their parents) have is the opportunity to be employed. As mentioned above, when asked how the decision was made to select a major, the UF College of Agricultural and Life Sciences (CALs) survey indicated "career opportunities available." Even though the student numbers are down, employment prospects both in the private and public sectors are extensive. Recently, the St.

Table 3. Undergraduate enrollment for spring 2008 in the College of Agriculture and Life Sciences at the University of Florida.

Major	Number of students	Percentage of total
Agriculture education and communication	76	2.1
Agriculture operations management	115	3.2
Animal sciences†	509	14.1
Biology	200	5.5
Botany	23	0.6
Entomology and nematology	31	0.9
Environmental management in agriculture and natural resources	6	0.2
Family, youth and community sciences†	499	13.8
Food and resource economics†	374	10.4
Food science and human nutrition†	843	23.2
Forest resources and conservation	39	1.1
Geomatics	74	2.0
Golf and sports turf management	20	0.6
Horticulture science	32	0.9
Landscape and nursery horticulture	52	1.4
Microbiology and cell science†	278	7.7
Natural resource conservation	37	1.0
Non-degree	168	4.6
Packaging science	34	1.0
Plant science	21	0.6
Soil and water science	10	0.3
Statistics	11	0.3
Wildlife ecology and conservation	163	4.5

† The top five majors account for 70% of the enrollment. Reference: <http://cals.ifas.ufl.edu/cir/>.

Johns River Water Management District in northeast Florida advertised a soil scientist's position. The position called for a B.S. degree with 5 years of professional experience directly related to soil mapping, interpretation, and classification. It had a salary range of \$55,993.60 to \$93,329.60. The high salary range is a result of high demand and low supply of soil scientists in Florida. Another situation we face is that when our students are employed, they generally are not given the title of "soil scientist" but given some other designation (e.g., environmental scientists, natural resource manager). Thus, students and the public don't "see" soil scientists in the work force.

What are Some of Our Constraints to Increase Our Numbers?

There are many reasons for the low numbers of students. Some are the result of specific university/administrative decisions while others are more general. Here are some of the reasons why UF has such low numbers majoring in SWS.

- Students at UF do not know about our program until it is too late to switch majors. For example, they take the introductory soils course late (junior or first semester senior) in their program. They enjoy the subject matter in the course and want to change their major. But it

is too late in their program; they would be "off-track" to graduate. So, some of them declare a minor in SWS. Others who may be seniors decide to join us as graduate students. During 1998 to 2008 the number of graduate students in the UF SWS Department increased from 43 in 1998 to 110 in 2006 (Fig. 5). Since 2004 we have been ranked number one or two in the number of graduate students in the college.

- Our science is not taught in high schools.
- We only have one county soil extension agent who majored in soils (25 years ago!).
- Their parents have never heard of our major, so their son/daughter is not encouraged to search out the opportunities in soil.
- Many majors in the CALS are in very high demand because students and parents believe these majors are required to be accepted into a professional school.

How Do We Overcome These Constraints?

- Advertise the introductory soils course across campus to incoming freshmen, transfer students, and undeclared majors. Identify the best instructor in the department and have him/her teach the introductory soils course. Above all, are soil science faculties committed to an undergraduate program?
- The teaching of soils in high schools may be changing. Many students majoring in agricultural education, who are required at UF to take the introductory soils course, will be teaching science or FFA (Future Farmers of America) in high schools. Several students have expressed to me that they will be using their notes from my class to teach. But can we wait until high school to get students interested in the dynamic field of soils? In 2006 SSSA created the S591 K-12 Committee to reach out to individuals in elementary and middle schools. The objective of the committee is to "increase interest and awareness of soil science and related sciences as a scientific pursuit and career choice" (<https://www.soils.org/committee/S591/>; verified 26 Sept. 2008).
- Parents have never heard of the major because they have never interacted with a soil scientist or at least not realized it. It is going to be difficult to change the attitude of the parents. One way is to advertise the employment opportunities for soils scientists, and the fact that their son/daughter may be able to attend professional school.
- Administrators need to support the major. University of

Florida is the largest university in Florida with a student population of 51,725. As a result of its excellent opportunities and programs, thousands of students apply, but few are chosen. One reason that admission is denied to a well-qualified student is that the student has applied to a degree program that is in demand, thus overpopulated. Examples of this are shown in Table 3 where in spring semester 2008 five of the top majors (22 majors in the college) accounted for approximately 70% of the students. These five majors have one thing in common—many of these students have a desire to attend a professional school upon graduation. Administrators could screen the students' applications and determine if the students have the background and an interest in soil science. Because SWS is an "under-enrolled" major, the chances of a student being accepted to UF would probably increase greatly.

Future of the Major

Does the soil science undergraduate program have a future? To answer that question let's look at the demographics of what we presently have. Recently, the Soil Science Society of America (SSSA) conducted a survey of its members (Collins, 2006). Of the responses received, it was observed that the "average" SSSA member was a male with a Ph.D. working at a U.S. university. The median age is 48 years with 26% of the members over the age of 55 and 17% under the age of 35. Hartemink et al. (2008) reported that the average age of members in the Dutch Society of Soil Science was 52 and in Denmark, 50% of the members in their society are over 50. Thus, soil scientists are "mature" nationally and internationally.

I concur with the statement by Hartemink et al. (2008) which states "The increasing age of soil science society members may be due to (1) lack of influx from a younger generation, which would include a lack of soil science graduates and/or (2) younger soil scientists are not joining learned societies in the same proportions as the previous generations." These concerns have been addressed by SSSA through the American Society of Agronomy (ASA) Early Careers Members Committee (ACS 530). Also, graduate students are given a reduced membership fee and that fee is carried to their first year of employment. Another way to increase the number of "younger" members is allowing undergraduate students to join SSSA as an individual. Previously, undergraduates could only join ASA, and this was through their student Agronomy Clubs.

The age factor can also be seen at the universities. Many faculty members have or will be reaching retirement age. Will retiring faculty members be replaced, and if so will they be replaced with individuals who have an interest in students? It is a shame that the new, bright, and young faculty members, who can relate to high school and college-age students, are being steered toward research and graduate students in order to obtain promotion and tenure. Also, some of these new faculty members received their degrees in discipline other than soils.

These changes are becoming especially obvious in departments that have become a smorgasbord of disciplines. Lal (2007) expressed this viewpoint when he

commented, "The downward spiral started...but (was) exacerbated during the 1990s when the already-battered soil science community was merged as a conglomeration with unrelated disciplines such as fisheries, wildlife, parks and recreation, policy, communication, etc." He goes on to say, "...soil science is slated for slow but sure extinction." We can see the outcome of these decisions by observing the names of departments, majors, and/or concentrations/specializations/tracks related to soil science (Table 1).

Will we in the United States follow our colleagues in the United Kingdom and Ireland where only a very few soil science departments still exist? Many university administrators believe that if a department does not have a strong undergraduate program, the department is nonessential. Tasky discussed this statement in 1994 and it is more significant today. We have seen many soil science departments that were combined with other disciplines to create mega-departments. In departments that have remained, discussions have centered on combining the undergraduate programs.

Tasky (1994) stated, "If the soil science profession is to remain viable and dynamic into the coming millennium, opportunities and expertise must not be forfeited or relinquished to other professions, either willingly or by default." We are now 8 years in the "next millennium." Most likely to continue the soil science curriculum, the program needs to be in a department in which the faculty is dedicated to the students and reaches out to associated disciplines such as agronomy, hydrological sciences, environmental sciences, engineering, wetlands, and geological and geographic sciences.

Conclusions

Concern about the declining enrollment of undergraduate students majoring in soil science has existed for many years. This declining trend has caught the attention of the NAS-NCSS. A subcommittee of the NCSS was formed to address the situation and concluded that the decline of soil science interest by undergraduates is for the most part occurring nationwide. Our international colleagues tell us that the trend is also occurring in their countries.

There could be many causes for this decline, including: (1) not changing the public's perception—why are we off the radar screen for parents and potential students?; (2) offering a "traditional" soil science curriculum with dull courses; (3) combining departments, thus losing identity; (4) renaming the major or only offering soil science as a concentration/specialization/track; (5) maintaining the current administrative decisions, such as limited classroom space; and (6) competing for students with "high demand/enrolled" majors. These issues were raised and possible solutions were presented.

As a result of this decrease in majors, graduate students are coming from other disciplines without the basic undergraduate courses in soil science, soil science departments are being eliminated or combined, and national and international soil societies' statistics show that soil scientists are not getting any younger. We don't have a fresh generation of soil scientists.

Courses in the soil science curricula must be changed

and modernized so that the content is more appealing to today's students. New courses should also be added to curricula to meet the rapidly changing technology. Changing the name of a course or department is not likely enough. Course content should be regularly evaluated to determine if the material is relevant and "appealing" to attract students.

Soil science departments and faculty should make more of an effort to publicize the employment opportunities available to undergraduates in soil science. As more soil science graduates are employed, prospective employers will become aware of the qualifications and availability of soil science graduates. Thus, more opportunities for future graduates will likely become available.

One final note: It is expected that the soils exhibit titled "Dig It: The Secrets of Soil" at the Smithsonian Institute in Washington, DC, will be seen by millions of people during the 18 months it will be open (<http://forces.si.edu/soils/>; verified 26 Sept. 2008). It will be interesting to see if this exhibit will have any influence on the number of students who choose soils as a major.

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Please detach the bottom portion of this page, fill in the blanks, and return with a check made out to ISCA for the appropriate membership amount.

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- Digital copy in Microsoft Word
- Use as little formatting (indents, bullets, charts) as possible. This increases the work to get it into Publisher.

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- Winter (February)
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Guess who? Can YOU identify these soil scientists?

Hint: They are not new to the profession!

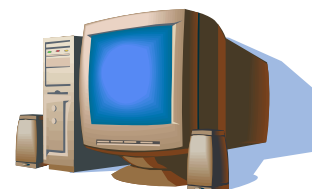


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