



# Illinois Soil Classifiers Association Newsletter

Winter-February 2018

## Upcoming Events:

2018 Annual Meeting	March 31, 2018
2018 Loessfest, Volgograd,	September, 23-29, 2018

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## Message from the President

The opportunity for a young professional to polish soil classifying skills on-the-job through soil mapping has largely disappeared. While there will always be some job opportunities with government and academia, I feel that private industry will fuel future demand for soil classifiers. Today's new classifiers are more likely to spend only part of their time examining soil profiles, however. Consulting firms crave multi-dimensional employees, so it is imperative that you acquire additional skills to make yourself more valuable to employers and protect yourself from the layoff ax. Proficiency in CAD, plant identification, or GIS/GPS applications can get your foot in the door and keep you employed during economic downturns. Participate in professional organizations to the extent you can. ISCA, for example, has many opportunities for committee membership. You can keep abreast of current issues, meet new colleagues, and benefit from continuing education opportunities.

Much discussion has taken place about how to expedite the accrual of classifying experience for younger ISCA members to achieve certification. Be proactive and approach older classifiers about mentoring possibilities; the resulting collaboration will likely be mutually beneficial. We need new blood to remain a viable part of the scientific community and to continue serving the needs of the public. Each person in our membership has valuable skills they can contribute to keep ISCA and the practice of soil classifying relevant. I urge you to do something to help further our profession in the following year. With the upcoming annual meeting, my term as president will end. It has been a privilege, and I look forward to seeing younger members assume more prominent roles in our organization.

— Todd Soukup

## 43<sup>rd</sup> ISCA Annual Meeting

March 31<sup>th</sup>, 2018

Forbes Building, 1816 South Oak Street, Champaign, Illinois

Register by mail or On-line at the ISCA Website by March 24<sup>th</sup>  
Registration Fee: \$20 per person (non-members \$30)

Check-in begins at 11 am, with lunch beginning about noon. After lunch Dr. Freyfogle will give his presentation, followed by the ISCA business meeting. A Council Meeting will precede activities, beginning at 10:30 am.

\*\*This meeting will provide **3 PDH** for **category C**—attendance or participation in seminars, tutorials, clinics, workshops, symposia, in-house courses, field tours/exercises, or technical presentations made at meetings, conventions, or conferences.\*\*  
**AND 1 CEU** for Ethics Training for SSSA Certification.

**ISCA 2018 Annual Meeting  
March 31th, 2018  
Illinois Natural History Building,  
1816 S. Oak St., Champaign, IL**

Name \_\_\_\_\_

Number Attending \_\_\_\_\_ (\$20/member; \$30/nonmember)

Total Payment \$ \_\_\_\_\_

Please register by **March 24** so that we can get a head count for lunch. Please fill out the above information and mail with a check (payable to ISCA to the following address):

Chuck Frazee

65 Gaffney Road  
Divernon, IL 62530

Or register online at [illinoissoils.org](http://illinoissoils.org) and pay using PayPal

### **Our Speaker: Dr. Eric T. Freyfogle**



Professor Eric Freyfogle, a Swanlund Chair Emeritus at the University of Illinois at Urbana-Champaign, received his JD *summa cum laude* from the University of Michigan Law School, and subsequently served in the Secretary of the Army's office as assistant to the army general counsel. He then practiced law in Indianapolis for three years before joining the University of Illinois' law faculty in 1983. Dr. Freyfogle has authored or edited numerous books dealing with issues of humans and nature. These books focus on legal aspects, along with larger cultural and social issues. His work is broadly interdisciplinary, and is guided by a conservation ethic that seeks better ways for humans to live in nature.

Dr. Freyfogle has particular expertise in Environmental Ethics, and Natural Resource/Environmental Law. He has lectured widely to conservation organizations and at other universities. He is a native of central Illinois, and actively promotes regional and national conservation efforts.

## Ballot for 2018 ISCA Elections

Voting rights are for Full Members only.

Please vote for one for each office by placing an X next to the name.

See the candidate biographies on the next page for more information about the candidates.

Write-in candidates must have agreed prior to the election to run for that office.

### President-Elect

Mary Beth Falsey

Write-in candidate for President-Elect \_\_\_\_\_

### Vice President

Jay Wise

Josh Litwiller

Write-in candidate for Vice President \_\_\_\_\_

### Secretary

Scott Wiesbrook

Write-in candidate for Secretary \_\_\_\_\_

Submit your ballot:

You may bring your ballot to the 2018 ISCA Annual Meeting or you may vote prior to the Annual meeting by mailing your ballot to Scott Wiesbrook at 1816 S. Oak St., Champaign, IL 61820. Please seal your ballot in a separate envelope and mark it with "Ballot" on the outside of that envelope. Mailed ballots must be received by March 30th, 2018 in order to be counted.

## Officer Nomination Biographies

### President Elect

#### **Mary Beth Falsey**

Mary Beth attended Northern Illinois University where she received a B.S. in Geography with an emphasis Natural Environmental Systems and an M.S. in Geography with an emphasis in Soil Science. She has worked for DuPage County Stormwater Management for 14 years. She spent the first 11 years in the Wetlands Division reviewing and approving wetland delineations, specializing in hydric soil verifications and determinations. Since 2015, she has been the Water Quality Supervisor and is responsible for DuPage County's compliance with the County's NPDES ILR40 permit and also coordinates the County's IEPA grant funded efforts on watershed planning for impaired waterways. She is an active ISCA member who has assisted in planning, and has been an instructor at, the ISCA Hydric Soils Course in 2014 and 2017.

### Vice President

#### **Jay Wise**

Jay Wise was raised just north of Houston in Conroe, TX. After graduating from high school, he enrolled at Lamar University in Beaumont, TX to study physics. After obtaining his B.S. in 2003 and a short stint as a physicist, he went on to pursue his M.S. in Radiological Health Physics in the Department of Nuclear Engineering at Texas A&M University in College Station, TX. After graduating with his M.S. in 2005, he decided it was time to pursue his love of soils and enrolled in the soil science PhD program in the Department of Soil and Crop Sciences at A&M to focus on soil chemistry and fertility. After graduating with his doctorate in 2012, he went on to work for Shell Oil Company in Houston, TX to work on soil fertility projects for their global biofuels division. To further strengthen his understanding of soils and soil fertility, he accepted a position as the Lead Soil Scientist with SGS North America in Kewanee, IL in 2015. During this time, he founded his own company – Wise Soil Fertility Services to focus on special soil fertility projects as a contractor. During his time in Illinois he became certified as a Illinois Soil Classifier to add to his business portfolio and to fulfill a decade – long interest. He later went on to work for the U.S. Department of Interior as a soil scientist in Grants Pass, OR focusing on forest soils and mining claims. During this time, he achieved the designation as Certified Professional Soil Scientist. Just recently, Jay accepted a position as the Chief Soil Scientist and Laboratory Manager at United Soils, Inc. in Fairbury, IL to shift his focus back onto his passion for soil chemistry and fertility.

#### **Joshua Litwillwer**

Josh Litwiller graduated from Illinois State University in May 2015. He works full-time with his father-in-law, Bill Teater, doing on-site soil investigations. Josh became an ISCA member two years ago and hopes to become certified in the near future. He has served in various leadership capacities in the past and is currently involved in a leadership role at his church as a mentor to high school students. Josh lives in Tremont, IL with his wife, Gabrielle.

### Secretary

#### **Scott Wiesbrook**

Scott Wiesbrook received a B.S. in Agricultural Science with an emphasis in Soils in 1996 from the University of Illinois. He spent two more years at UI working on a M.S. under Dr. Robert Darmody before accepting a position at the Illinois Natural History Survey as a soil/wetland scientist. Since 1998 Scott has conducted wetland delineations, assessed potential sites for wetland mitigation, and monitored created/restored wetlands for INHS. He is currently the Assistant Project Leader for Soils in the Wetland Science Program, which involves some database maintenance, supervisory responsibilities, and report reviewing; in addition to actually getting to map soils and wetlands. He has helped Bob Darmody coach the U of I soil judging team since 1996, and has also coached Black Hawk College, East Campus to 8 NACTA Soil Judging National Championships (2 year division) since 2000. He joined ISCA in 2008, is finishing his first term as secretary, and has served as vice president, 3 terms on the finance committee, and one term on the ethics, certification and membership committee.

## Texture Collection Project End-of-Year Update

Submitted by Bill Teater

Material collected so far for this project include:

- 1) Silt Loam and
- 2) Silty Clay Loam (<35% clay) formed under Loess parent material,
- 3) Loamy Sand formed under Eolian Sand parent material,
- 4) Loam formed under Glacial Till parent material.
- 5) Silt formed under Loess parent material,
- 6) Fine Sand formed under Eolian Sand parent material, and
- 7) Silty Clay Loam (35% clay) formed under Glacial Till parent material.

Three soil samples are ready to go to the lab.



Photo Credit: Josh Litwiller

## National Cooperative Soil Survey Newsletter Released

Submitted by Mark Bramstedt

Newsletter Issue 81 of the National Cooperative Soil Survey was released in November of 2017. This issue of the NCSS Newsletter reminds the Webmaster of the former **Soil Survey Horizons** publication - giving news of events, recent discoveries of soil science, and adventures in soil science mapping and appears to be a possible outlet for NCSS cooperators (like ISCA) to share soil science stories of interest. Current and past issues of Newsletters can be found here: [https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/partnership/ncss/?cid=nrcs\\_142p2\\_054340](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/partnership/ncss/?cid=nrcs_142p2_054340)

## Alfic Udarent MLRA Project Proposal

Submitted by Kristine Ryan

### MLRA 110 – Alfic Udarents, clayey, anthropogenic soil investigation

Anthropogenic soils classifying as Alfic Udarents (Keys to Soil Taxonomy, 11<sup>th</sup> edition) were mapped as consociations and in complexes with urban land and/or natural soils during the initial soil survey of Chicago. The 12<sup>th</sup> edition of the Keys added new taxa for human-altered/human-transported (HA/HT) materials. This project will collect additional horizon data to document the type and content of artifacts, depth of the HA or HT material, and the subgroups into which these soils fit based on current Taxonomy. Data map units will be updated with the newly collected field data collected in order to improve interpretations. With the interest in urban agriculture, this field project will provide relevant data to support conservation and food security efforts by NRCS and our partners. About 2204 acres will be evaluation during this two year project with a staff of three.

### Project Details

Project: MLRA 110 – Alfic Udarents, clayey, anthropogenic soil investigation

### Objectives and Procedures

This MLRA field project proposes an investigation of the “Alfic Udarents, clayey, 0 to 2 percent slopes”, “Alfic Udarents, clayey, 2 to 6 percent slopes”, and “Alfic Udarents, clayey, 6 to 12 percent slopes” map units. These three map units are linked to three data map units: 0811A Alfic Udarents, clayey, 0-2%, IL031 (DMU ID 593969), 0811B Alfic Udarents, clayey, 2-6%, IL031 (DMU ID 593973), and 0811D Alfic Udarents, clayey, 6-12%, IL031 (DMU ID 593974). These map units occur in MLRAs 110 and 97, and they occur on ground moraines of till plains (Valparaiso and Lake Border Morainic Systems) and the wave-worked till plain of a Lake Plain (Glacial Lake Chicago).

Previously collected and described pedons will be reviewed. “Alfic Udarents, clayey” map units from which these pedons were collected will be visited in order to collect the documentation necessary for re-classification. This data will be used to update the map units and data map units in consociations. Data collection will expand to the “Alfic Udarents, clayey” component that are part of a complex in order to refine the RIC of anthropogenic soils. The data collected will be used to update these map units and data map units in a separate project because a complex will require a different approach in project development. A lab analysis measuring sodium absorption ratio (SAR), particle size analysis (PSA), bulk density (Db), and organic carbon, will be done on all samples collected either in the office or at the Northern Illinois University laboratory. In the field, close attention will be paid to landforms, the diagnostic horizons, type and content of artifacts, whether the material is human-altered or human-transported, depth of the HA or HT material, and the subgroups into which the soils fit.

The Aurora staff's goal is to conduct 20 transects in order to determine a representative range in characteristic and to dig 15 pits to better observe the physical properties of the soil and to collect samples for lab analysis. Because data collection will not be hindered by the planting and harvesting of crops we can focus a bulk of the field work over the summer months. Map unit size will determine if a transect is appropriate and we may have to reduce our number as the project progresses. Access and timing will also affect how many pits can be dug so that number may also change as the project progresses.

This project will provide a range in characteristics for the anthropogenic soils with the potential for the establishment of a named series.

## Alfic Udarent MLRA Project Proposal Continued

Map units included in this project:

Alfic Udarents, clayey, 0 to 2 percent slopes

Alfic Udarents, clayey, 2 to 6 percent slopes

Alfic Udarents, clayey, 6 to 12 percent slopes

Data collection will be conducted in Cook County in MLRA 110 and part of MLRA 97.

### Areas included in the project:

Soil Survey Area	Soil Survey Area Symbol	MU Symbol	National MU Symbol	DMU	Map Unit Name	Map Unit Acres
Cook County	IL031	811A	2qhr9	593969	Alfic Udarents, clayey, 0 to 2 percent slopes	1187
Cook County	IL031	811B	2qhs7	593973	Alfic Udarents, clayey, 2 to 6 percent slopes	702
Cook County	IL031	811D	2qhr9	593974	Alfic Udarents, clayey, 6 to 12 percent slopes	315

Total acres in project: 2,204

### Timeframe

This project will begin in October 2017 and end by September 30<sup>th</sup>, 2019. Field sampling and data evaluation will be completed by July 2019. Database population and spatial edits will be completed by September 2019. Field travel to each site will vary, depending on traffic and time of day. The project will include field work to determine whether material is human altered or human transported and the soil properties/characteristics associated with the human modified soils.

### Benefits

Scientific: The major benefit of this project will be that the 'Alfic Udarents' will have representative soil properties captured and populated in the database. Currently the soil properties populated in NASIS were copied from the 'Orthents' data map unit. The data collected will be more current and better reflect soils that retain diagnostic soil properties while reflecting human modified characteristics.

External: This will result in improved soil interpretations for the users of soil survey information and will support the growing demand for soils information in the urban sector.

Internal: The updated attribute data will result in improved conservation planning activities by agency personnel for the urban farmer.

Synergy: Data collected and the resulting decisions made will provide the necessary background information to assist with improving soil data for the 'Alfic Udarents' component in complexes.

Efficiency: This project totals 2,204 acres. This field work and data collection will improve the soil data and our knowledge of soils in urban areas. The data collected can be applied to other map units with anthropogenic soil components.

### Travel Budget Needs

None determined at this time

## Why Were the Soil Tunnels of Cu Chi and Iron Triangle in Vietnam So Resilient?

Submitted by Dr. Kenneth R. Olson, Professor Emeritus of Soil Science

In March of 2016, I traveled to Vietnam. I am a Vietnam Era Veteran who served in the US Army from 1969 to 1973. As a result of the Vietnam War winding down, my all-expense paid trip to Vietnam was cancelled by the Army. So I decided to go at a later time as a civilian. However, life happened, and I was not able to go for another 43 years. As a career soil scientist, I had an interest in traveling to and examining the Cu Chi and Iron triangle tunnels which connected the Ho Chi Minh trail and Saigon. From 1966 to 1968 the US Air Force bombs and the US Army search and destroy missions were not able to eliminate these tunnels; and the Viet Cong were able to invade Saigon during the Tet Offense of 1968. I decided to travel to remnants of these tunnels that have been restored and maintained at Vietnam War Memorial Park in Cu Chi. After walking into tunnel chambers and crawling into the tunnel complexes I attempted to utilize my soils training to assess the soils selected by the Viet Cong for use as tunnels and then try to determine why they were so difficult to find and destroy by our ground troops and by bombers. The reason the tunnels were so resilient is related to the nature and properties of the soils. These tunnels changed the outcome of the Vietnam War.

Soil findings are summarized in the Abstract of the recently published paper:

The full paper in English is available free from Open Journal of Soil Science (Chinese publisher) (click on link) [http://file.scirp.org/pdf/OJSS\\_2017020911121143.pdf](http://file.scirp.org/pdf/OJSS_2017020911121143.pdf)

### **Abstract**

At the peak of the Vietnam War, the network of tunnels in the Iron Triangle and Cu Chi linked Viet Cong (VC) support bases over a distance of some 250 km, from the Ho Chi Minh Trail and Cambodian border to the outskirts Saigon. In the early 1960s, the United States escalated its military presence in Vietnam in support of a non-Communist regime in South Vietnam. The North Vietnamese and VC troops gradually expanded the tunnels. Tunnels frequently were dug by hand in Old Alluvium terraces, and only a short distance at a time. Four major efforts were made by the US Military to locate and destroy these tunnels. These included Operation Crimp, a search and destroy mission that began in 1966 and a geological and soil survey approach designed to detect VC tunnels. Later in 1967, General William Westmoreland tried launching a larger assault on Cu Chi and the Iron Triangle areas. The operation called Operation Cedar Falls was an expanded version of Operation Crimp. Finally in 1969, B-52s started carpet bombing the Cu Chi and Iron Triangle areas and destroyed many of the tunnels. However, not before the tunnels had proven very effective in 1960s at hiding and protecting the VC during US occupation of the area. The nature and properties of the Old Alluvium soils were key to the soil tunnels being so resilient. Soils located in Old Alluvium terraces had high levels of clay and iron. Iron (Fe) leached from the upper soil layers (0 to 1.5 m) and accumulated in the lower layers (1.5 to 20 m) and became a cement-like binding agent. When dried the soil layers took on properties close to concrete, and were resistant to ever becoming soft and moist again especially around the aerated tunnel walls. The tunnels were dug in the monsoon season when the upper layers of soil were soft and moist but not in dry season. The soils were highly stable without any lining or support. After drying out, the soil materials surrounding the tunnel turned into concrete like material that could withstand adjacent explosive blasts.



## Why Were the Soil Tunnels of Cu Chi and Iron Triangle in Vietnam So Resilient?

This paper has taken on a life of its own. The US Air Force military historians at Robins AFB in Georgia, who contribute to the Pentagon Paper series, have found, summarized and cited the Cu Chi tunnel paper. A Vietnam Veterans web site has added a section on their web page with the link to the paper and included the reference. The Vietnam Center and Archive in Lubbock, Texas has accepted the paper for archiving and will make it available to future historians. They were the source of information used in the Ken Burns Vietnam War series that was recently shown on national TV. Dec. 3, 2018 is the 50th Anniversary of the Tet Offensive and I anticipate being invited to the two-day conference in Lubbock to present the paper. The English version of the paper along with figures and maps have been translated into Vietnamese and is being submitted to a Vietnamese History Journal for possible publication. An attempt is being made to have copies of the Vietnamese translation of the manuscript as well as the original English version sold to tourists at the Vietnam War Memorial Park Gift shop in Cu Chi, Vietnam. This memorial is a very important Vietnam Memorial and attracts thousands of tourists and visitors each day. The Vietnamese translation of the paper will be submitted for review by the Vietnamese government, military and Memorial Park board and its availability will be subject to their approval.

## IALEHA Annual Wastewater Conference Panel Discussion January 11-12, 2018, Bloomington-Normal, IL

Submitted by Don Fehrenbacher

I was invited by IALEHA to participate in a panel discussion about concerns interpreting the IL State Sewage Code from the perspective of Soil Classifiers. The Illinois Association of Local Environmental Health Administrators hosted a discussion at their Annual Onsite Wastewater Treatment Conference in Bloomington-Normal on January 11-12, 2018. The panelists were Rick Maguire of Maguire Backhoe Inc.; Chad Moorman, IDPH; Don Fehrenbacher, ISCA; and was moderated by Donnie Simmons, Livingston Co. Administrator. Four Questions were posed to the panel.

**Question 1- Does the State Code require a Soil Investigation on every Wastewater System installed in Illinois based on Section 905.190 b)3)?** Chad answered first and stated that surface discharge systems should not necessarily require a soil investigation. Don F. stated that even surface discharging systems should require a soil investigation for the technological feasibility evaluation before a Waters of U.S. determination as per the IL-NPDES general permit. Rick Maguire stated that he uses soil evaluations on all the systems he installs.

**Follow-Up to Question 1- What is the correct procedure for IL-NPDES General Permits and Waters of the U.S. Determinations?** Donnie Simmons stated that some counties in southern IL were installing surface discharging systems based on the homeowner's determination that a surface discharge would not reach WOUS. Chad stated that it is USEPA's responsibility for the NPDES program. Don F. reiterated that a soil evaluation is part of the technical feasibility part and that WOUS may include adjacent wetlands and ephemeral streams based on Supreme Court Decisions and not just Traditional Navigable Waters. Rick Maguire did not have experience with NPDES permits. Chad stated that a berm could be used to contain a surface discharge and avoid the WOUS.

## IALEHA Annual Wastewater Conference Panel Discussion January 11-12, 2018, Bloomington-Normal, IL

### **Question 2- What is the proper Sampling Distance between Borings for a Soil Evaluation?**

Don F. quoted the Code, "...borings shall be at least 50 feet apart..." as a minimum not a maximum. Soil evaluations should represent the entire proposed absorption area and that maybe only one soil boring was in the area with others much further apart including the lowest elevation. Don F. stated that the relationship between the classifier and installer should be based on mutual sharing of knowledge. Rick Maguire said that he works primarily with one classifier and that they have an excellent professional relationship. Rick shared that he has pulled as many as 6 borings for the classifier at a large site or a site that may be altered. He gave an example of a house built with a walk out basement and that the construction ruined the proposed absorption area, and that the additional borings identified an alternative suitable area. Don F. stated that additional borings should be part of a good soil investigation when needed.

**Question 3- What is the correct Separation Distance to a Limiting Layer and what is the correct Depth below the System Trench to Determine the Loading Rate?** *Donnie Simmons stated the distinction between the vertical separation distances of 2 feet or 3 feet (soils with loading rates  $>.62$  gall/day/ft<sup>2</sup>) to a seasonal high water table and the depth to evaluate loading rates being 2 feet below the trench bottom. Don F. agreed with Donnie S. and added that the extra 1 foot of separation to a limiting layer was designed to insure proper treatment in more permeable soils, but that 2 feet was adequate for the design loading rate for all soils. Rick and Chad agreed with the discussion. (NOTE: The code states that the loading rate design zone starts at the top of the gravel or gravelless or chamber system to 2 feet below the bottom of the trench, Section 905.60a)1).*

**Question 4: How should Soil Fill be Evaluated for Wastewater System Design?** *Don F. responded that a soil classifier evaluates fill soil that preexisted on a site using a conservative approach due to likely compaction or high variability. There were a number of follow-up questions, Don F. said that Section 905.60 applies to the use of fill to construct an absorption system as it is titled "...Construction Requirements" and that a preexisting fill situation is covered in 905.55 "...Design Requirements." Chad was asked the meaning of the statement: "The use of fill for installing subsurface seepage systems shall not be approved for lots platted after March 15, 1996." (905.60a)8)B). Chad responded that it means what it says. A number of other questions and comments were made but there was no final consensus answer to the question.*

**Thanks again to IALEHA and Donnie Simmons,**

*Don Fehrenbacher*

(A detailed account is posted on our website under "Soil Information/Soils and Septics.")

## LOOKING BACKWARD: An Essay Recalling Events in the History of the Illinois Soil Classifiers Association

Submitted by Bill Kreznor, ISCA Historian

### ISCA Short Course: Soil Evaluation for On-Site Wastewater Disposal, 22-23 September 1989

*“For the things we have to learn before we can do them, we learn by doing them.” Aristotle*

The series of events that led to the planning and execution of the first short course/workshop sponsored by the ISCA was guided by many forward-thinking individuals serving a variety of interests. Jack Paschke (Figure 1), a Soil Conservation Service soil scientist who authored several soil surveys in northeastern Illinois in the 1960s and 1970s, was not ready to enjoy retirement from federal service. He continued working as a county soil scientist on contract in Iroquois County and performed consulting work making detailed soil maps for land developers into the early 1980s. These maps were used for land planning and were found to be especially useful for residential development for homes served by septic systems. Local planning agencies also found the maps and interpretations of the soil properties extremely valuable when reviewing development plans.

Walt Parks and Benny Weiss (Figure 2) (also retired former SCS soil scientists) were employed with the Southern Seven Public Health Department, a consortium serving seven counties in extreme southern Illinois. In early 1985, Parks and Weiss conducted a 2-day “soil-sewage seminar” that was attended by twenty-eight county health department sanitarians from southern and central Illinois. Perry County soil survey leader Dana Grantham and Southern Illinois University pedology professor Joe Jones lent assistance. The program included lectures, discussion, and a session in the field.

During the latter part of the 1980s, northeastern Illinois SCS area soil scientist Don Fehrenbacher served as Chair of the Public Relations and Education (PR & E) Committee. He regularly reported on his activities cultivating contacts with major players in the onsite wastewater treatment community in the Chicago suburbs. Don had been routinely responding to calls for technical assistance, including onsite investigations, from local health department regulators, public and private sector land planners, and septic system designers and installers. Fehrenbacher also served as a technical advisor to a committee charged with revising the sewage treatment ordinance of McHenry County, including codifying the use of onsite soil investigations and soils information for siting and sizing septic systems. Fehrenbacher recognized that his agency would not be able to service the growing number of requests from local health departments for technical assistance and onsite investigations. He envisioned the ISCA and its members assuming this role. This concept was echoed by Bob Layer, staff engineer with the McHenry County Planning Department, who suggested to members of the ISCA Executive Council that the ISCA serve as a conduit for technical assistance to local agencies.

The adoption of regulations for onsite wastewater treatment incorporating soils information by several of the counties in northeastern Illinois in the late 1980s served as a catalyst for statewide use of soils information. Doug Ebelherr (Figure 3), Program Manager for Sewage Treatment, Illinois Department of Public Health (IDPH) followed the lead of his northeastern Illinois colleagues and began work revising the IDPH Private Sewage Disposal Licensing Act and Code. He was receiving some technical assistance toward this end from Fehrenbacher and Jerry Berning. Berning served as a SCS soil scientist in central Illinois and was successful in getting Ebelherr to accompany him in the field. Berning, using this hands-on approach, effectively demonstrated how the characterization and interpretation of soil properties for onsite wastewater treatment by an experienced soil classifier would serve the public interest. Ebelherr became convinced and prioritized including soil investigations and soil properties in a revised State Code. Considering the complexities of the soils and geology of Illinois, political differences, and varied economic and social interests, it is not surprising that a new State Code would not be enacted until 1996.

## LOOKING BACKWARD: An Essay Recalling Events in the History of the Illinois Soil Classifiers Association

At the beginning of 1989, the ISCA was becoming firmly established as a “go-to” organization for technical assistance in the onsite wastewater treatment industry. The ISCA Annual Meeting that spring featured Brad Cate, a consulting soil scientist/soil classifier and head of Eastern Shore Soil Service in Delaware. Cate spoke in part about the importance of professional organizations like the ISCA to assume a leadership role in providing training and technical assistance to users of soils information. The Executive Council had authorized publication of a list of members willing and able to provide consulting services in January. In March, the ISCA PR & E Committee and the Program Committee were charged by the Executive Council with developing and executing a statewide short course/workshop dedicated to soils and onsite wastewater treatment. Although the ISCA had served as sponsor for several local, state, and regional conferences earlier in its history, it had never taken leadership in conference curriculum, speakers, venue, and logistics. This undertaking required a team effort. Bill Kreznor and John Tandarich chaired the PR & E and Program committees, respectively. Serving with Kreznor were Fehrenbacher, Bruce Houghtby, and Mike Vice. Tandarich was aided by Bruce Putman, Terry Schmidt, Weiss, and Gloria Westphal. This group included soil classifiers employed in both the public and private sectors and having a wide range of experience in locations throughout Illinois.

The committees selected Lakeside Center, a religious retreat near Crystal Lake, for a location. The retreat offered a large conference room, kitchen, and overnight accommodations for speakers. The short course was set up to begin after lunch on Friday afternoon with presentations, a two-hour banquet, and a resumption of presentations into the late evening. Saturday would feature a field tour beginning at 8am and ending at 3pm, including a one-hour lunch break.

The short course speakers represented a variety of disciplines. A panel of local regulators discussed using soils information and permitting requirements within their respective jurisdictions. A civil engineer addressed how soils information is used in siting and sizing onsite wastewater treatment systems. A panel of public and private sector soil classifiers discussed methods and problems encountered in conducting onsite investigations. Pedologists from the University of Illinois (a conference sponsor) described soil properties important for the proper functioning of onsite wastewater treatment systems. Glacial geologists from the Illinois State Geological Survey described the characteristics of surficial materials that would be examined during the field tour the following day. The program concluded at 10pm that evening. (Figures 4, 5, and 6).

The following morning, participants in the field tour were greeted with cool but clear conditions. The tour was led by Houghtby, Kreznor, and Putman (Figure 7). Among the four stops on the tour was a pit in contrasting soil materials: loamy and sandy glacial outwash sediments over clayey lacustrine sediments. Alternatives for onsite wastewater treatment in such soil materials generated a lengthy discussion. Tour participants were also able to examine a long pipeline cut through sandy loam glacial till in hummocky terrain. The glacial sedimentary environment appeared to be one characterized by stagnant ice and featured remarkable variability in the soil materials along the cut.

The short course was well attended. There were 115 registrants and speakers, 55 of which were ISCA members. Eighty-five people attended the Saturday field tour (Figures 8 and 9). The short course generated almost \$4000 in income. This included sales of a few surplus short course handbooks to interested individuals unable to attend. Still, the short course ran a deficit of nearly \$1000 to the ISCA. Neither Kreznor nor Tandarich have put together another one.



Figure 1. Jack Paschke, circa 1978. He was the first consulting soil scientist in northeastern Illinois and established early relationships with health and planning department regulators in that region.

Figure 2. Benny Weiss addresses conference attendees. After retirement from the Soil Conservation Service, he and Walt Parks worked for the Southern Seven Public Health Department, a consortium of seven counties in the southern tip of Illinois.

Figure 3. Doug Ebelherr, IDPH Program Manager for Sewage Treatment, discusses potential changes in the Illinois State Code at the conference.

Figure 4. Bill Mellen, Lake County Health Department sewage program manager, was one of a panel of local regulators in northeastern Illinois who spoke at the conference.

Figure 5. Civil Engineer Duray Potter describes his role in codifying the elimination of percolation testing in favor of onsite soil investigations to site and size septic systems in McHenry County. This included contracting for the first detailed soil survey specifically used to plan a residential subdivision served by septic systems.

Figure 6. University of Illinois pedologist Bill Simmons discussed soil physical properties important for interpreting the use of soils for onsite wastewater treatment.

Figure 7. Field tour leaders (from left) Bruce Houghtby and Bruce Putman, and Program Committee Chair John Tandarich.

Figure 8. Participants in the field tour gather at one of the stops.

Figure 9. Field tour participants examine a soil pit.

## A Conversation to Ensure the Future of On-Site Consulting

Submitted by Bill Teater

For much of the past 30+ years baby boomers have dominated the ranks of ISCA and much of the soil discipline in Illinois. The average age of our certified consultants on our website is almost **62** and getting older. The Illinois Department of Public Health updated their code four years ago. In it, they changed the rules which eliminated Perk tests. They are depending on us to provide the next generation of on-site septic consultants so we need to train them and prepare them to take over. **My hope in this article is to stimulate some thinking and hopefully spark some changes, so that we will make this new generation of expert consultants both possible and properly prepared.** This will require a clear workable career path for the next generation.

What aspects of a career path should we be considering?

1. How do you get someone to go to college to get a degree with the right soil classes?
2. How do you get someone trained under a qualified classifier for multiple years until they are ready to work in a multi-county area with different parent materials?
3. How do you develop a business model that will make all this effort pay off for them and their family?

What will attract people to our discipline? I understand how universities and the NRCS can maintain soil positions for people to move into. But what will convince enough people to start doing on-site investigations to *adequately* replace the boomer consultants as they retire? I emphasize 'adequately' for two reasons. First, the university and NRCS are not producing enough excess soil's people who would be willing to give up a steady paycheck and good benefits to cover the loss of retiring consultants. Second, our boomer consultants have decades of experience and are able to do well over vast swaths of the state because of decades of mapping and other investigations. Those of us that came to have sufficient experience to identify soils independently over a multicounty area had at least three years of full time training. Our college degree counted for getting us in the door but the day-in-day-out experience over those training years gave us the ability to do the job well.

My point? **Who we bring in to replace us needs years of day-in-day-out supervised training to succeed in doing on-site consulting.** Workshops and classes and occasionally mentoring will not provide what is needed to identify the parent materials, textures, landscapes, etc. over the multicounty area they will work in. We might be able to widen the acceptable courses allowed to qualify academically and some other things, but we would be doing great harm to the quality of the on-site soil investigations produced by our members, if we did not maintain the years of field training with supervised experience. If we choose to cut corners on training our reports will risk error. Increased error will increase septic failures and we may find the installer's liability problems for a failed system breathing down the necks of ill prepared classifiers. Therefore, can we agree that the career path for doing on-sites could lighten up on the academic courses, BUT to properly prepare the new classifier there must be *years of supervised field training* to avoid the risks of inexperience?

So, let's look at this path and see what obstacles we might be facing.

**To attract new people we need to show reasons that this career will be profitable.** For anyone to use the time and money to gain the degree and classes needed to qualify to be a consultant, they will have expectations. Among other things, it *must* provide them a good career and a good income.

## A Conversation to Ensure the Future of On-Site Consulting

Let's say for example, let's say I just got a degree with the needed classes and I am expecting a good paying career. Well, I am not quite ready yet...I am not certified. I am not trained in the field. So... I cannot start consulting just yet. **What I need is an entry level apprentice type job to get me the experience I need.**

Where will I find a job that will give me the years of training I need to get certified and do a good job? Hmm. This entry level job also needs to pay sufficiently. If it doesn't pay well enough, how will I pay off college bills, etc.? So... it must be full time (Why would I go to college to get a part time job?) and have a reasonable progressive wage. That wage will need to be something like the NRCS pay sequence of GS 5, following in a year by GS 7, then GS 9. And it better have some benefits and some raises along the way or I will quit and go elsewhere. After all, I went to college to enter a profession. Finally, I am expecting to make enough money when I get on my own to make it worth my time, and enough extra money to supply me through down times in the economy and also extra for retirement.

So where is this entry level professional job that will quickly move me on to a high paying consulting career? **That entry level job must come from an existing consulting business that is lucrative enough to take care of the owner's livelihood AND pay to hire and train the new classifier for years.** That means that our soil consulting businesses must be so lucrative it can support two households and be worth it to the owner. There is also a dilemma here. Why would the owner want to train his competition, so he can lose part of his business in the end? Unless the apprentice is being trained to take over the business (like a family member), there isn't the incentive to train an apprentice unless there is a non-compete clause when training is done. But that would leave our apprentice with experience and no job in that area of the state and moving to another area and starting a full-time on-site consulting business from scratch is very hard to do. Septic installers provide the lion's share of referrals and installers usually develop a comfortable, if not a loyal, business relationship with soil classifiers. Unless you are taking over for a consultant, the installer already has someone, and they are not likely to be looking for change. Competing with other consultants can make a full-time income difficult.

This brings me to maybe the biggest obstacle for our career path to succeed, and that is profitability. Profitability determines income. Income determines whether there is enough to be able to make a fulltime living. And this income must be big enough to offset bad economic downturns and set aside money for retirement.

If there is not enough income, then few people will be attracted to this profession. **Without enough income there won't be the ability to hire and train the next generation of consultants.** Without enough income this profession will dwindle and die before the knowledge and experience gets handed down.

What influences profitability? The number of jobs (the economy) and pricing.

The total number of jobs in Illinois is out of our control, but all of us soil consultants, need to consider how our pricing is affecting our profession. Our pricing has a direct effect on the profitability and future of this profession. What makes us good soil scientists does not necessarily make us good at maintaining a profession.

If a person graduates, trains, and starts a business, and competition does not allow for expansion, then how long will they stay in business if their net income is \$40-\$50 thousand? Won't they say to themselves I can do better doing something else! But what if their pricing was higher and their net income was \$90-\$100 thousand or more. If we could make this profession lucrative enough, we would attract people. And we would have owners that could provide the entry level jobs that will train the next generation!

## A Conversation to Ensure the Future of On-Site Consulting

So, what influences our pricing? Should pricing be based on an hourly wage comparison or should it be based on whatever amount will supplement my other income and make me comfortable? Should pricing be whatever is a little less than the other soil consultants in my area? Or should it be whatever pricing will create an income that will attract people, train them, and maintain a profession?

One factor that affects our pricing negatively is that some of us can rely on other sources of income to make ends meet like a pension or other job. Because of that, we can make ends meet while charging lower prices. This is artificial and damaging to the long-term survival of our profession.

**I propose we quit with the short term personal profitability models and start thinking about maintaining our profession's profitability long term!**

Do we consider our reports valuable? The Department of Health does. They eliminated Perk tests. Do we consider our reports valuable enough to make sure the profession lives on after we quit? Not if we charge less than what is needed to keep this profession a viable profession.

As a profession we need to establish a foundation for fair pricing that will act as an incentive to attract others to continue as we retire or move on. Consider fees charged by other professions: My car dealership works on my car for \$100+/hour, self-employed electricians often earn over \$100,000 per year. We need to think like a profession and charge accordingly. The risks and responsibilities within the consulting business are considerably different from government service. For example, a private consultant's exposure to liability is vastly greater and private consultants must be able to withstand the ups and downs of the economy. The private consultant also must pay the full cost of health insurance and have a significant amount of their income set aside for retirement. These factors must be considered when determining what is fair to charge for services.

I think part of the problem is we can get lost in how easy it is for us experienced classifiers to make analysis and recommendations. In a few minutes we can make the soil property determinations needed and in a few hours, we can complete the investigation report. And, because we don't see the real value and what is needed to make sure there is a future for the profession, we charge too little. **We should see ourselves more like other professions that are paid for their knowledge.** For instance, the radiologist that looks at my x-ray is experienced, discerning, and much needed. In a few minutes they can make the critical decisions and analysis and in an hour document it and they charge enough that they can pay for employees and make a big salary. They are paid for their knowledge, not their hours, because it is valuable. Our on-sites are also valuable. They help determine decisions that may cost or save our clients thousands of dollars. Replacing a septic is expensive and we need correct analysis. Our consultants are valuable, and our fees need to reflect that.

I am currently trying to carry out the career path that has been described. I am trying to do that with my son-in-law. Obviously, I have a vested interest in his success and he in mine. I don't worry about the non-compete clauses or what I will do if work gets to be light. I will pay him to insure he succeeds even if I get less. Fortunately, I can rely on my NRCS retirement to help me when there are lulls in the economy. I raise my prices each year, but the dilemma of cheaper competition limits my fee. Fortunately for me my pension helps buffer this problem. If I did not have a family loyalty, then I would not likely set myself up with a full-time employee because training a new employee cuts into my income. If I could raise prices sufficiently then I could maintain my profitability while training a new classifier.



## A Conversation to Ensure the Future of On-Site Consulting

**If our discipline is to survive and thrive then we must have an adequate career path with sufficient training.** It also means on-sites must be more lucrative than they are now. Some of us may be charging fees big enough to satisfy ourselves because of another job or pension, but we are not preparing the way for ISCA to provide the classifiers for the future. I am not saying we need to be greedy (I do pro bono jobs for the needy), but I am saying that if you have another job or have a pension and are doing things part-time, please think of the future generation of classifiers and charge enough that they can have a career path that will make a good living. If we don't do something soon to make a career path to a profitable profession, **who** will be willing to replace us old baby boomers before we are gone?

### A rough comparison of income and expenses when adding an employee

<b>Lower soil fee</b>	
<b>Year 1 Expenses</b>	
Vehicle & maintenance, etc	\$15,000
Buisness Insurance	\$2,000
Accountant, legal, etc.	\$1,000
Home office and supplies	\$2,500
Utilities, Phone, etc.	\$3,500
Payroll expenses	
Workmans comp.	\$1,020
Employer FICA taxes,	<b>\$2,295</b>
Unemployment Ins.	<b>\$900</b>
Employee Health Insurance plan	?
Employee retirement plan	?
<b>Employee wages</b>	<b>\$30,000</b>
Gross Expenses	<b>\$58,215</b>
<b>Gross Income</b>	
<b>400 jobs x \$290 (avg.)</b>	<b>\$116,000</b>
<b>Gross Profit for owner</b>	<b>\$57,785</b>
<b>owner expenses</b>	
Social security and Medicare 15.3%	<b>\$8,000</b>
Self Employed Health Insurance	\$10,000
IRA deduction	\$5,500
	\$23,500
<b>For Owner</b>	<b>\$34,285</b>

<b>Increased soil fee</b>	
<b>Year 1 Expenses</b>	
Vehicle & maintenance, etc	\$15,000
Buisness Insurance	\$2,000
Accountant, legal, etc.	\$1,000
Home office and supplies	\$2,500
Utilities, Phone, etc.	\$3,500
Payroll expenses	
Workmans comp.	\$1,020
Employer FICA taxes,	<b>\$2,295</b>
Unemployment Ins.	<b>\$900</b>
Employee Health Insurance plan	?
Employee retirement plan	?
<b>Employee wages</b>	<b>\$30,000</b>
Gross Expenses	<b>\$58,215</b>
<b>Gross Income</b>	
<b>400 jobs x \$350 (avg.)</b>	<b>\$140,000</b>
<b>Gross Profit for owner</b>	<b>\$81,785</b>
<b>owner expenses</b>	
Social security and Medicare 15.3%	<b>\$11,672</b>
Self Employed Health Insurance	\$10,000
IRA deduction	\$5,500
	\$27,172
<b>For Owner</b>	<b>\$54,613</b>

## A rough comparison of income and expenses when adding an employee

<b>Lower soil fee</b>	
<b>Year 2 Expenses</b>	
Vehicle & maintenance, etc	\$15,000
Buisness Insurance	\$2,000
Accountant, legal, etc.	\$1,000
Home office and supplies	\$2,500
Utilities, Phone, etc.	\$3,500
Payroll expenses	
Workmans comp.	\$1,020
Employer FICA taxes,	<b>\$3,060</b>
Unemployment Ins.	<b>\$1,200</b>
Employee Health Insurance plan	?
Employee retirement plan	?
<b>Employee wages</b>	<b>\$40,000</b>
Gross Expenses	<b>\$69,280</b>
<b>Gross Income</b>	
<b>400 jobs x \$290 (avg.)</b>	<b>\$116,000</b>
<b>Gross Profit for owner</b>	<b>\$46,720</b>
<b>owner expenses</b>	
Social secuity and Medicare 15.3%	<b>\$6,307</b>
Self Employed Health Insurance	\$10,000
IRA deduction	\$5,500
	\$21,807
<b>For Owner</b>	<b>\$24,913</b>

<b>Increased soil fee</b>	
<b>Year 2 Expenses</b>	
Vehicle & maintenance, etc	\$15,000
Buisness Insurance	\$2,000
Accountant, legal, etc.	\$1,000
Home office and supplies	\$2,500
Utilities, Phone, etc.	\$3,500
Payroll expenses	
Workmans comp.	\$1,020
Employer FICA taxes,	<b>\$3,060</b>
Unemployment Ins.	<b>\$1,200</b>
Employee Health Insurance plan	?
Employee retirement plan	?
<b>Employee wages</b>	<b>\$40,000</b>
Gross Expenses	<b>\$69,280</b>
<b>Gross Income</b>	
<b>400 jobs x \$375 (avg.)</b>	<b>\$150,000</b>
<b>Gross Profit for owner</b>	<b>\$80,720</b>
<b>owner expenses</b>	
Social security and Medicare 15.3%	<b>\$11,509</b>
Self Employed Health Insurance	\$10,000
IRA deduction	\$5,500
	\$27,009
<b>For Owner</b>	<b>\$53,711</b>

## A rough comparison of income and expenses when adding an employee

<b>Lower soil fee</b>	
<b>Year 3 Expenses</b>	
Vehicle & maintenance, etc	\$15,000
Buisness Insurance	\$2,000
Accountant, legal, etc.	\$1,000
Home office and supplies	\$2,500
Utilities, Phone, etc.	\$3,500
Payroll expenses	
Workmans comp.	\$1,020
Employer FICA taxes,	<b>\$3,825</b>
Unemployment Ins.	<b>\$1,500</b>
Employee Health Insurance plan	?
Employee retirement plan	?
<b>Employee wages</b>	<b>\$50,000</b>
Gross Expenses	<b>\$80,345</b>
<b>Gross Income</b>	
<b>400 jobs x \$290 (avg.)</b>	<b>\$116,000</b>
<b>Gross Profit for owner</b>	<b>\$35,655</b>
<b>owner expenses</b>	
Social secuity and Medicare 15.3%	<b>\$4,614</b>
Self Employed Health Insurance	\$10,000
IRA deduction	\$5,500
	<u>\$20,114</u>
<b>For Owner</b>	<b>\$15,541</b>

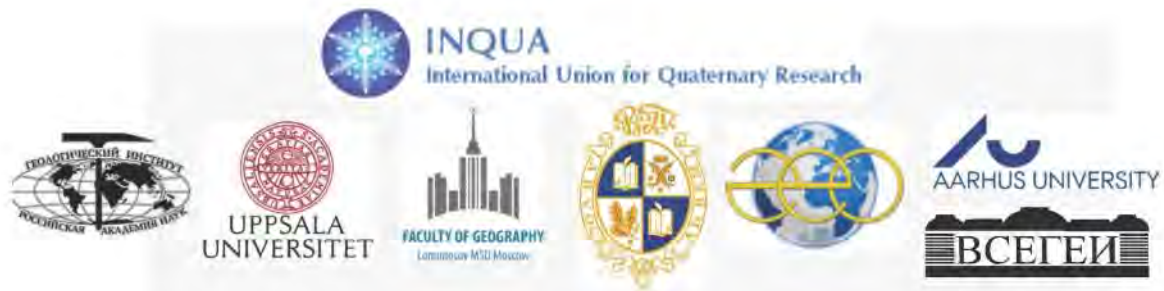
<b>Increased soil fee</b>	
<b>Year 3 Expenses</b>	
Vehicle & maintenance, etc	\$15,000
Buisness Insurance	\$2,000
Accountant, legal, etc.	\$1,000
Home office and supplies	\$2,500
Utilities, Phone, etc.	\$3,500
Payroll expenses	
Workmans comp.	\$1,020
Employer FICA taxes,	<b>\$3,825</b>
Unemployment Ins.	<b>\$1,500</b>
Employee Health Insurance plan	?
Employee retirement plan	?
<b>Employee wages</b>	<b>\$50,000</b>
Gross Expenses	<b>\$80,345</b>
<b>Gross Income</b>	
<b>400 jobs x \$400 (avg.)</b>	<b>\$160,000</b>
<b>Gross Profit for owner</b>	<b>\$79,655</b>
<b>owner expenses</b>	
Social secuity and Medicare 15.3%	<b>\$11,346</b>
Self Employed Health Insurance	\$10,000
IRA deduction	\$5,500
	<u>\$26,846</u>
<b>For Owner</b>	<b>\$52,809</b>

## A rough comparison of income and expenses when adding an employee

<b>A reasonable professional soil fee with Employee benefits</b>	
<b>Year 3 Expenses</b>	
Vehicle & maintenance, etc	\$15,000
Buisness Insurance	\$2,000
Accountant, legal, etc.	\$1,000
Home office and supplies	\$2,500
Utilities, Phone, etc.	\$3,500
Payroll expenses	
Workmans comp.	\$1,020
Employer FICA taxes,	<b>\$3,825</b>
Unemployment Ins.	<b>\$1,500</b>
Employee Health Insurance plan	<b>\$10,000</b>
Employee retirement plan	<b>\$3,000</b>
<b>Employee wages</b>	<b>\$50,000</b>
Gross Expenses	<b>\$93,345</b>
<b>Gross Income</b>	
<b>400 jobs x \$500 (avg.) OR 500 jobs x \$400 (avg.)</b>	<b>\$200,000</b>
<b>Gross Profit for owner</b>	<b>\$106,655</b>
<b>owner expenses</b>	
Social secuity and Medicare 15.3%	<b>\$15,477</b>
Self Employed Health Insurance	\$10,000
IRA deduction	\$5,500
	<u>\$30,977</u>
<b>For Owner</b>	<b>\$75,678</b>

## Loessfest 2018 Volgograd, Russia

Submitted by Brad Cate



### LOESSFEST 2018

*"DIVERSITY OF LOESS: PROPERTIES, STRATIGRAPHY, ORIGIN AND REGIONAL FEATURES".*

VOLGOGRAD, RUSSIA, 23-29 SEPTEMBER 2018



**Registration information and details of the conference can be found at:**  
[http://www.geogr.msu.ru/science/conf/Loessfest2018\\_First\\_Letter.pdf](http://www.geogr.msu.ru/science/conf/Loessfest2018_First_Letter.pdf)

Volgograd is a city of southern Russia, the capital of Volgograd Oblast. The city is noted for its history, culture, architecture and industry. Formerly known as Stalingrad, it was given its present name in 1961, as part of a wider process of destalinization. It became famous for its resistance during the beginning of the Battle of Stalingrad, followed by the surrounding and the capitulation of 6th German Army during World War II. It is often regarded as the largest and bloodiest battle in the history of warfare, which today is marked by an impressive monument and cultural site. The population of Volgograd urban area is estimated more than 1 million. Volgograd is also one of the host cities of the 2018 FIFA World Cup. In Sothem Russia, the end of September is a good time for Field Trips. Daily maximum temperature is usually about 20-25° C.



Some pictures from the organizers of potential sites that could be visited on the field tours.



Leninsk section



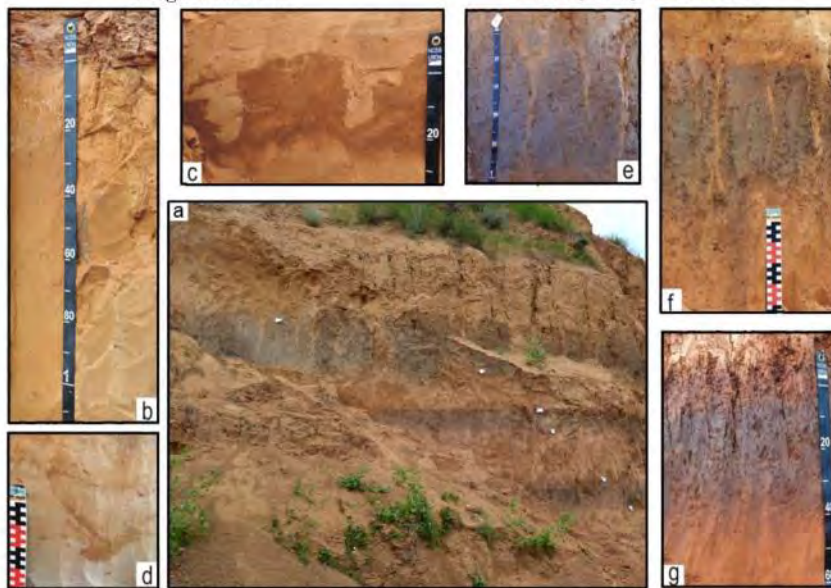
Batayevka section



Raigorod section



Nizhneye Zaymishe section



Srednyaya Akhtuba section

Brad and I looked up some costs:

Early Registration for the conference is 100 Euros.

Air Fare: about \$700 to \$1000 depending on what airport you fly out.

Hotel: I can find hotels for < \$60 a night.

Currently the travel advisory is a Level 3 for Russia (Reconsidered travel) as of 1/10/2018.

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

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### 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. It can be done, but increases work load for the committee.

The Newsletter Committee reserves the right to make edits/corrections deemed appropriate

### 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.

## ISCA on Facebook

For those of you who want to keep in touch with ISCA members and others interested in soils in Illinois, join our group on Facebook. Search Facebook for "Illinois Soil Classifiers Association" and become a friend of ISCA. Anyone may post messages, announcements, pictures or events that may be of interest to our membership. This is a great venue for posting meetings of other associations or organizations who use soil information. This is also a great place to post pictures of recent projects, interesting soils, or maybe something unrelated to soils, but of general interest to the membership. If you don't have a Facebook account, it is easy to set up. Just go to [www.facebook.com](http://www.facebook.com) and follow the instructions. Unfortunately, the Facebook site is restricted on some government computers, so many of you will need to do this at home. Contact [webmaster@illinoissoils.org](mailto:webmaster@illinoissoils.org) if you have any difficulty in accessing the ISCA Group or if you have any questions or comments.



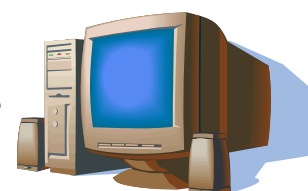
### ISCA Newsletter Committee is looking for pictures of its members, past or present, to include in future newsletters.

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](http://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](http://www.illinoissoils.org/news)**

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

### Change of Address Form

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

E-Mail: \_\_\_\_\_

\*Mail to: Scott Wiesbrook, ISCA Secretary, 1816 S. Oak St., IL 61820





# Illinois Soil Classifiers Association Newsletter

Spring-June 2018

## Upcoming Events:

Soils of Illinois TBD

## Inside this issue:

Message From the President	1-2
New Member Bio	3
ISCA on Facebook	4

## Message from the President

With recent national and local discussions and concerns about the future of the discipline of soils and careers in soil science, I thought back over my career in soil science and realized that there have been a few things that have been constant, since I started in 1977. One of those constants is “Time”, one of the 5 soil forming factors. Time changes Entisols to Inceptisols to Alfisols. Time changes us, as well, allowing transformations, translocations, and the development of our own personal argillic horizon. I can see the impact of Time in the mirror; my personal “topsoil” eroding to a bare summit, and so on! Time allows change to happen and nothing stays the same.

The Illinois Soil Classifiers Association has been nearly as constant as Time, since its inception in 1975 with our values, mission, functions, and objectives. As stated in our brochure, the objectives of ISCA are; “to Protect the Public Welfare”, “Advance the Profession of Soil Classifying”, and “Promote the Wise Use and Conservation of the Soils of Illinois”. Our Association continues to be steady. Even during the hey-days of mapping, ISCA was never larger than about 100-ish members, with under half of the membership certified. Even today, ISCA has 105 members with 46 certified. ISCA is also affected by Time, as members change, move on, or pass from life into soil. Are we older? Maybe. But I remember the day that ISCA was dominated by the likes of Joe Fehrenbacher, Burt Ray, Cliff Miles, Fred Awalt, and others from the previous generation. I wonder if that generation was concerned about the future of the discipline as they saw the discipline change? Rest assured, ISCA is still a relevant organization. We have founding members of the Association, we have members who joined in the 1980s - 2000s, and we have members who have joined in recent years and weren’t part of the “once-over” mapping days. Members from all those generations are active and ISCA is alive and well.

Reading back through old Newsletters, there is also a constant reminder from the in-coming President to call for action and involvement by all ISCA members. I am excited that we have interested members offering to serve as committee chairs and as officers on the Council. This year we plan to accomplish the first segment of the Soils of Illinois Tour (future plans for a multi-day tour). We will host a Field Day for testing and honing our skills, helping members obtain experience with soil evaluations for septic systems. In addition, a soil/landscape manual is under development to help guide and define the process of describing soil, and to standardize technical terminology for our membership. To help with these activities, the Council will again, try to get input from our membership. Your input is vital for guiding the activities of the Council. Please watch for a Survey Monkey or some other method in the up-coming weeks, for you to easily give your “two cents’ worth” of comments. If you are interested in helping with any of these activities, let your name be known. Your help will be greatly appreciated.

Here are the names of the Executive Council and the 2018 Committee Chairs. Some of the committees may need more members, so if you are willing to help, send a note to:

[Council@illinoissoils.org](mailto:Council@illinoissoils.org)

### 2018 ISCA Council

President – Bramstedt  
Vice President – Josh Litwiller  
Secretary – Scott Wiesbrook  
Treasurer – Charles Frazee  
President Elect – Marybeth Falsey  
Past President – Todd Soukup

## President's Message

### Committee Chairs and Special Appointments

Constitution, By-Laws, and Legislative Committee – Alicia Metzger, chair. Members: Ian Kenney and Patrick VerHalen  
Ethics, Certification, and Membership – Bruce Houghtby, chair. Members: Marybeth Falsey, Carol Latowski, and Dennis Keene

Nominations – Todd Soukup, chair. Members: Doug Gaines and Frank Heisner

Public Relations and Education – Jay Wise, chair. Members: TBD

Finance – Josh Litwiller, chair. Members: Galen Litwiller and Bill Teater

Newsletter – Jenwei Tsai, chair. Members: Rachel Welch, Dennis Keene, and Alicia Metzger

Technical Advisory Committee – Brad Cate, chair. Members: Don Fehrenbacher, Bruce Putman, and Clayton Heffter

Special Appointee to Advisory Commission – Don Fehrenbacher

Historian – William Kreznor

Webmaster – Bramstedt

Ad Hoc Soils of Illinois Tour committee – Sarah Smith

Ad Hoc Soil Texture committee – Bill Teater

### Certification Board

Kenneth Anderson '19

Patrick Kelsey '19

Robert McLeese '20

Galen Litwiller '20

Robert Tegeler '21

Roger Windhorn '21

—Mark Bramstedt



Todd handing off the gavel to Mark at the 2018 annual meeting. Thank you, Todd for your service as our fearless leader this past year! Congratulations, Mark and thank you for saying yes to serve us!

## New Member Bio

### Welcome to ISCA Dr. Clay Robinson!

I consider myself an ambassador for soil. It is this passion that spawned my alter-ego, Dr. Dirt, who has a web-page of soil science activities for teachers and students, and a social media presence (Twitter, Facebook, Instagram, and YouTube). Dr. Dirt has talked with hundreds of teachers and more than 20,000 K-12 students, sending them home with the message that without soil, everyone would be hungry, naked, and homeless. (Check out the YouTube video for the presentation and motions.) This passion led to his work on the Soil Science Society of America's K-12 committee, and to being a co-editor of the popular 2012 textbook, "Know Soil, Know Life", published by the Soil Science Society of America.

Clay earned a BS in Agriculture and an MS in Agronomy from West Texas State University, and a PhD in Soil Science from Iowa State University. He has worked in arid and semiarid regions for 25 years as a professor of soil science, and as an environmental consultant. He often has been invited to speak and write about the Dust Bowl, and the climatic factors, agricultural practices, and political policies that contributed to it, and was featured in the Dust Bowl documentary, "Black Blizzard". He also served as the Education Manager for the American Society of Agronomy and the Soil Science Society of America, and just completed his second year at Illinois State University where he has returned to his roots, studying the effects of management practices on soil properties. (He did research on soil health before it was cool.) Due to his consulting work and coaching teams for the collegiate soils contest, he has described soils in four countries on three continents, and in seventeen states. Illinois Mollisols and Alfisols are much different than those in other areas where he has worked.



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- 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. It can be done, but increases work load for the committee.

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- Fall (November)



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## ISCA on Facebook

For those of you who want to keep in touch with ISCA members and others interested in soils in Illinois, join our group on Facebook. Search Facebook for "Illinois Soil Classifiers Association" and become a friend of ISCA. Anyone may post messages, announcements, pictures or events that may be of interest to our membership. This is a great venue for posting meetings of other associations or organizations who use soil information. This is also a great place to post pictures of recent projects, interesting soils, or maybe something unrelated to soils, but of general interest to the membership. If you don't have a Facebook account, it is easy to set up. Just go to [www.facebook.com](http://www.facebook.com) and follow the instructions. Unfortunately, the Facebook site is restricted on some government computers, so many of you will need to do this at home. Contact [webmaster@illinoissoils.org](mailto:webmaster@illinoissoils.org) if you have any difficulty in accessing the ISCA Group or if you have any questions or comments.



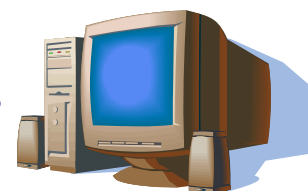
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### [www.illinoissoils.org](http://www.illinoissoils.org)

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](http://www.illinoissoils.org/news)**

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\*Mail to: Scott Wiesbrook, ISCA Secretary, 1816 S. Oak St., IL 61820



# Illinois Soil Classifiers Association Newsletter

Summer-August 2018

## Upcoming Events:

Soils of Illinois Oct. 19-20  
Tour

## Inside this issue:

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## Message from the President

Soil Classifiers and Friends,

From our inception, ISCA has continued to provide learning opportunities to, not only our own membership, but to other Friends of the Soil. This year is no different. Check out the announcement for our Fall Meeting. Both the Soils of Illinois Tour - North Central Segment and the Seminar for Septic Evaluations provide opportunities for all of our membership to broaden their understanding of soils in our own backyard. In addition, the Soils of Illinois Tour is not only for soil classifiers, but we are encouraging restoration ecologists, CCAs, educators, public health department staff, master naturalists, and others who have an interest in the soils of Illinois to attend this event. On the second day of our fall meeting, the septic seminar will provide opportunities for both the experienced and the inexperienced soil classifier to hone their skills on evaluating and classifying soils and to compare results against other soil classifiers. Don't miss out!

Over the past several years, there has been interest from ISCA members in developing a state-wide tour of the major soils and landscapes in Illinois. A thought came to me recently, that over the years, ISCA has already developed a Soils of IL Tour. I remember summer and fall meetings over the past 40 years across the whole state on major landscapes, checking out the soils and learning about the major soils of Illinois. These meetings included the Central States Forest Soils workshops, as well as the fall meetings of ISCA. If you were part of the crews that led one of our summer/fall field trips, or if you saved the guidebook and reports from those meetings, let me know what you have. We may be able to re-create a Soils of Illinois Tour from all of our previous field trips! That would be an amazing tour!

Hope to see you in October in north-central Illinois!

—Mark

## Soils of Illinois Fall Tour

Submitted by Don Fehrenbacher

### **SAVE THE DATE** NORTHERN ILLINOIS SOILS FIELD WORKSHOP Friday, October 19th, 2018



**8:00 AM** Registration at DeKalb County Farm Bureau, 1350 W Prairie Dr., Sycamore, IL.

Coach Bus Transportation from Farm Bureau Parking Lot and Return will be provided.

**8:30 AM** Buses Depart

**Lunch** will also be provided. A **small fee** will be charged to cover costs.

CEU's for Septic Contractors

Speakers:

Dr. Michael Konen, Geography Dept., Northern Illinois University, DeKalb, IL

Mr. Bruce Putman, Putman Soil Testing Inc, Woodstock, IL

Mr. Tom Copenhaver, Coordinator for OWTS and Water Wells, Lake Co. Health Dept.

Mr. Brad Woodson, Natural Resource Manager, McHenry Co. Conservation Dist.

**Follow-up session on Soil Evaluations on Saturday, October 20th in Big Rock, IL area.**

Illinois Soil Classifiers Association: registration will be available soon at <http://www.illinoissoils.org/>

## More on Soils of Illinois Fall Tour and Field Seminar

Submitted by Sarah Smith, Alicia Metzger, and Brad Cate

The tour, on Friday the 19<sup>th</sup>, will include three stops in DeKalb and McHenry counties to observe a variety of parent materials, landscapes, and land use among other things. We plan to include soil scientists, certified crop advisors (CCAs), local health department officials, Master Naturalists, and educators as tour participants. Presentations and group discussions will include topics of interest for each of these groups.

On Saturday the 20<sup>th</sup>, there will be a field seminar focused on providing instruction for septic site evaluations. Anyone is invited to participate, but the focus will be on consultants who conduct these evaluations on a daily basis. Topics of discussion will include how to locate and document soil borings, key components to be evaluated in a soil, how to assign loading rates, and what should be included in a soil evaluation report. Experienced evaluators will be on site to help guide the discussion and descriptions. There will also be a field exam held for certified members and those just wanting to practice their skills. One-on-one mentoring opportunities will be available for those seeking certification or brushing up. If you are eligible for a field practicum to finish the certification process, this may be a good opportunity to satisfy that need.

More information on registration and agendas will come soon. If anyone has questions or comments, please send them to [sarah.smith@il.usda.gov](mailto:sarah.smith@il.usda.gov).



## New Member Bio

**Welcome to ISCA Dr. Andrew Margenot!**



Dr. Margenot began his journey in soils upon joining the graduate program in soil science at the University of California Davis. He conducted his doctoral research on phosphorus cycling, with an emphasis on weathered soils in East Africa. After graduating in 2016 with a PhD in Soils and Biogeochemistry, he was a postdoctoral researcher at UC Davis studying metal nanoparticle impacts on soil nutrient cycling.

In August 2017, he joined the Department of Crop Science at the University of Illinois Urbana-Champaign as Assistant Professor of Soil Science. Having survived the first Midwestern winter, he now leads the Soils Lab. His research team addresses the literal foundation of all cropping systems – soils – and seeks to advance how we monitor and manage soils as natural capital. Current lines of research include nutrient cycling and heavy metal contamination in the U.S. Midwest and the developing tropics.

## Rogation Weekend at Grace Lutheran Church

by Bill Kreznor

For the last several years, Grace Lutheran Church in Woodstock, Illinois has celebrated Rogation Weekend on the last weekend of April. Rogation is derived from the Latin word rogare, to ask. It is a special time during which prayers are offered for a bountiful harvest.

Senior Pastor Ken Gibson has been involved in agriculture most of his life. He worked on a farm as a boy and young man. He was active in Future Farmer of America and represented his region at national FFA conventions. He still takes an occasional "day off" from pastoral duties to help one of his parishioners or family members plant or harvest. His love of all things farming led him to establish the annual celebration of Rogation Weekend.

Grace Lutheran Church celebrates the Rogation with a weekend of events. Seed, water, and soil are brought to the altar by a congregation farm family during worship services and are blessed. The Saturday evening service is followed by a dinner and agriculture trivia contest. On Sunday, members of the congregation and guests are invited to display their antique tractors in the church yard. (Pastor Ken is the proud owner of a restored John Deere. He admits that Rogation Sunday can also be known as "Pastor-Gets-to-Drive-His-Tractor-to-Work Day"). A mini farmer's market is held with fresh produce, eggs, honey, and dairy items available for purchase. Hayrides for young and old are offered traversing the church's 20-acre campus that includes an outdoor sanctuary, picnic/bonfire area, prayer labyrinth, and small vineyard from which the grapes will be harvested to make communion wine.

I routinely participate in the Sunday activities. I park my drilling rig near the tractors and display an exhibit called "The Soils of Grace". The display includes the soil map of the Grace campus, brief descriptions of the soils and mapping units, and freshly-pulled cores of two or three of the soils occurring on the property. I hand out stickers, pencils, and rulers with the familiar "I (Heart) Soil" message. I usually have some Drummer State Soil bookmarks, ISCA refrigerator magnets and "Illinois Understanding Soil" brochures, and a few of the NRCS Soils Planner calendars to distribute as well.

Pastor Ken invites some of his Illinois Centennial Farm family friends from the region to attend worship services and be recognized by the congregation. One of these may also preach the Saturday and Sunday sermons. This past April, Brad Bremer, a longtime friend of Pastor Ken delivered the sermon. Mr. Bremer, a Metropolis, Illinois native, is a 1983 graduate of the University of Illinois with a BS in Agricultural Communications. He currently serves as vice-president of G & S Business Communications. His firm provides strategy, marketing, and public affairs support for clients in the agriculture and biotechnology industries. They have offices in New York, Chicago, and Raleigh, NC.

Mr. Bremer's sermon highlighted how Dr. Norman Borlaug embodied science and faith. Borlaug was awarded the Nobel Peace Prize in 1971 for his work on plant breeding in the 1940s and 1950s that ushered in the Green Revolution. In his acceptance speech, Borlaug described how his work was inspired in part by the prophet Isaiah who spoke of the link between famine and social unrest. His calling was to put his knowledge and skills to work to break this link by addressing famine in the world.

Mr. Bremer continued his remarks by noting that Daniel Webster considered farmers as the founders of civilization. He went on to laud the providers of our food and fiber and their work to address the challenges of feeding a growing world population. Mr. Bremer concluded his message by suggesting that while farmers may have a unique connection with nature, all of us have a connection with the natural environment and should serve as stewards of it. When one loses that connection and is removed from that environment, one loses his or her sense of creation as a gift.

## Rogation Weekend Pictures



Figure 1. Antique tractors of all sizes are displayed on Rogation Sunday.

Figure 2. The Grace Knoll Vineyard.

Figure 3. "Soils of Grace" display includes soils information, give-away items, and an up-close look at a drilling rig.

Figure 4. The hay wagon waits to take parishioners on a hayride.

Figure 5. Pastor Ken Gibson poses with his restored tractor and preferred mode of transportation.

## LOOKING BACKWARD:

### An essay recalling events in the history of the Illinois Soil Classifiers Association

by Bill Kreznor, ISCA Historian

#### ASA-CSSA-SSSA Joint Meetings in Chicago, 1-5 December, 1985: ISCA Booth and Display

*“Many a small thing has been made large by the right kind of advertising.”* Mark Twain

The Illinois Soil Classifiers Association vigorously moved into its 11<sup>th</sup> year at the beginning of 1985. The Project Soil Survey program was still near its peak both in terms of the number of soil surveys underway and soil scientists employed. Almost 80 soil scientists held ISCA membership, 10 of which were newly accepted in 1984. The ISCA certification program was well established and had recently acquired formal affiliation with the national certification program for Soil Scientists and Soil Classifiers administered through the American Society of Agronomy (ASA) by the American Registry for Certified Professionals in Agronomy, Crops, and Soils (ARCPACS).

During the ISCA Executive Council meeting on 12 January 1985, President Sam Indorante observed that the joint national meeting of the ASA, Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA) would be held on Chicago. He indicated that while Chicago had been a preferred meeting place due to its location and amenities, the cost to the joint societies to meet in Chicago was becoming prohibitive. It was unlikely that the societies would be returning to that venue any time soon. For several years the Council had issued a stipend for the ISCA President to attend the ASA-CSSA-SSSA annual meeting, but it had rarely been used. President Indorante suggested that the ISCA have an official presence in Chicago, aside from officers and members attending at their convenience. He volunteered to pursue the issue and report back to a newly-elected Council.

In his message to the membership in the May 1985 newsletter, ISCA President Mike Lilly urged members to advocate for their profession. He noted that the ISCA was planning to have an official presence at the ASA-CSSA-SSSA joint meetings and encouraged the membership to attend. On 8 June, now Past President Indorante reported to the Council that he was able to secure a booth in Chicago at no cost to the ISCA. The booth would be located next to the ARCPACS booth. Several ideas were floated concerning the type of display, including a slide show illustrating the history of soil survey in Illinois and a display of monoliths of some Illinois soils. In the August 1985 newsletter, President Lilly again called upon members to attend the meetings and staff the booth.

The theme of the display exhibit was finalized at the Council meeting of 21 September. A general soil map of Illinois would anchor the display. The locations of ISCA members would be indicated on it. The display would include photographs of members and their activities in the field, office, and classroom. A guest book would also be available for booth visitors to sign. The display would be staffed during much of the middle 3 days of the conference (2-4 December) by ISCA officers, committee chairs, and members. President-Elect Mark Bramstedt moved to fund the display and the Council voted its approval.

Laurie Bonnewell King had volunteered in June to fill the recently-vacated position as Chair of the Public Relations and Education (PR & E) Committee. She was immediately tasked to compose the exhibit. Past-President Indorante assisted her in this effort. King contacted members to send her photographs showing their activities and many did so.

In the February 1986 newsletter, President Lilly reported that the ISCA booth was a “major success,” receiving a host of visitors and many favorable comments. He also commended PR & E Chair King for “putting together an excellent display”.

The display was re-assembled and exhibited at the 11<sup>th</sup> annual meeting of the ISCA on 15 March 1986 in DeKalb.

## Pictures of ASA-CSSA-SSSA Joint Meetings in Chicago, 1-5 December, 1985



Figure 1. The ISCA display on exhibit at the ASA-CSASA-SSSA joint meetings in Chicago.

Figure 2. ISCA President Mike Lilly welcomes visitors to the ISCA booth and display.

Figure 3. Past-President Sam Indorante (left) was largely responsible for securing the display location.

Figure 4. Laurie Bonnewell King, Chair of the PR & E Committee, the architect of the ISCA display.

## Pictures of ASA-CSSA-SSSA Joint Meetings in Chicago, 1-5 December, 1985



Figure 5. (left to right) ISCA members Mike Lilly, Tonie Endres, Chris Cochran, Wiley Scott, and Dave Rahe gather at the ISCA booth.

Figure 6. Albert Klingebiel (foreground, left) and Earl Voss shared a few stories at the ISCA booth.

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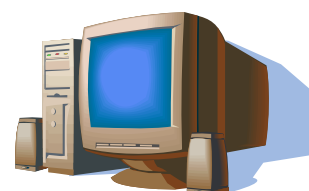
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Better yet... make it your home page!



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# Illinois Soil Classifiers Association Newsletter

Fall-December 2018

## Message from the President

### My Opinion on Being a Professional Soil Classifier

Submitted by: Mark Bramstedt

#### Upcoming Events:

43<sup>rd</sup> Annual Meeting    March 16<sup>th</sup>,  
Champaign, IL

#### Inside this issue:

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The 2018 Soils of North-Central Illinois tour and the Soils and Septics workshop the following day were an outstanding success! It took many ISCA members, CPSCs, and Friends of the Soil to pull off the events in an organized, professional way. ISCA has always considered that being a Professional Soil Classifier requires high standards, and these events demonstrated that. In our general informational brochure about ISCA, the first objective that is listed is to protect the public welfare. Two of the ways that ISCA desires to protect the public welfare are: a) establish and maintain high standards of technical competence and ethical conduct in the profession of soil classifying, and b) develop widespread awareness of the profession and an understanding of available technical information. Using our objectives as a measure of quality, the 2018 Fall Event was one of our best!

During the event however, I observed some things that concerned me. In all of my training, three soil properties stand out as being critical in every soil description – they were hammered home in my past training and in the training we give to others. These properties are color, texture, and structure. These three properties are critical in soil interpretations for almost every soil use. I have also been trained (even more so with wetland determinations) that if it wasn't documented, it wasn't observed. So, with these thoughts in mind, I was taken aback when I heard that some Soil Classifiers (including CPSCs) do not document soil colors in their descriptions. The color is relevant. Whether our clients care or not about a matrix color, to me is irrelevant. I feel that, above all, we are scientists. We are not just scientists, we are Soil Scientists. In addition, as Soil Classifiers, we are specialized Soil Scientists. We have skills that other Soil Scientists don't have and there are very few who have the specialized skills that it takes to be a Soil Classifier. As part of being a Soil Classifier, we document what we find, regardless of the final needs of the client. Our first role is to be a Soil Classifier, that specialized scientist. Our secondary role is to be a Soil Consultant or employee. I have never left the field thinking that I wrote down too much information. We record color, texture, and structure. Scientists document what is observed. It's just what scientists do.

In addition to not writing down colors, I was also taken aback when I heard a CPSC confess to a health department official, that he doesn't even use the Munsell Book in the field. It is one thing to confess quietly to another CPSC that one may feel confident in estimating soil color that the book is hardly used. However, to openly brag at a training session to non-soil classifiers, seemed out of place to me. Even though we think we "know" 10YR 4/2 vs. 10YR 4/3, to not use, or even carry a Munsell Color Book for a reference check, is bad science to me. One color chip difference can cost a client hundreds of dollars, or one color chip difference can be responsible for a septic system that fails to function or treat the effluent properly. We need to check the book!

## Message from the President

Soil Scientists and Soil Classifiers have fought an image battle for years – Dirt Bags, Dirt Daubers, Scum Buckets – we've all heard the jokes. We struggled for recognition from our employers, we received left-over, worn-out office furniture, we were put in dumpy, wet basement soil survey offices, we were assigned the vehicles that no one else wanted (like a tiny Chevy Chevette or Dodge Rampage that were too small for a 5 foot soil probe). People have made comments that Soil Taxonomy is just a mumbo-jumbo language and that soil science is a pretend science where we just make stuff up. To confess that we guess at soil colors and that we don't follow certain standards and guidelines, nor record critical information, just gives credence to others' critiques of who they think we are.

I believe that the examples I have noted here represent a minority of our CPSCs, as I know other Soil Classifiers who, as busy and successful consultants, fully document matrix colors, redox colors, and even colors of coatings. In my opinion, we are doing our discipline a disservice by not recording matrix colors and redox colors and by estimating soil color without using the Munsell Book. I feel that it is important to write a soil description that another Soil Classifier could review, visualize the soil, and come up with similar results. What makes us different from a Soil Technician or a casual observer, if we don't document like a scientist and use the tools that are critical in our trade? We are being observed every day in the work that we do. One misstep has the potential to threaten the entire discipline and profession. Let's take pride in who we are as PROFESSIONAL Soil Classifiers and make sure that our discipline as a Certified Professional Soil Classifier stands for something.

### **SAVE the DATE**

**43<sup>rd</sup> ISCA Annual Meeting**

**March 16<sup>th</sup>, 2019**

**1816 S. Oak St., Champaign, IL**

**More information will be available via email soon!**

## Burton W. Ray Award 2018

Submitted by Scott Wiesbrook

### Congratulations to Grace Trankina!!!



The Burton W. Ray Scholarship Award for Soil Science for 2018 winner is Grace Trankina. Grace is a senior in Natural Resources and Environmental Sciences at the University of Illinois at Urbana-Champaign. She served as a Pathways Intern for NRCS this past summer and is interested in a career working with soils and natural resources. Despite this being her first year on the soil judging team, Grace placed ninth overall at the 2018 Region 3 Soil Judging Contest in Prairie du Chien, WI. (Grace is the one holding the plaque in the middle of the team photo.)

## Soils of Illinois Fall Tour Write-up

Submitted by Alicia Metzger

ISCA had the pleasure of hosting a successful Soils of North-Central Illinois Tour in October 2018 which took place over two days in parts of DeKalb and Kane Counties. Overall, there were more than 40 attendees from many practice areas, including soil classifiers, septic contractors, and health department employees.

The tour kicked off on Friday, October 19 at the Bayer Crop Science Research Center, where attendees received an overview of the crop science research being conducted at the center by Rachel Welch and Zak Swanson, observed two soil pits for septic evaluation as presented by Bruce Putman, and received an overview at one of the three Wildlife Habitat Council approved pollinator habitats, presented by Nancy Leffler. The soil pits provided a nice overview of loess thickness and hydric conditions in Mollisols and loess over glacial till from the Batestown formation.

The tour continued at Headwaters Conservation Area, a 220-acre wetland mitigation bank constructed by V3 Companies in Campton Hills. George Milner, a senior ecologist from V3 Companies, provided an overview of wetland mitigation bank design and construction, pollinator habitat in upland prairie areas and cover crop selection for wetland and prairie areas. Three soil pits were available for the discussion of septic suitability as presented by Bruce Putman and Tom Copenhaver. Although the weather did not cooperate, attendees seemed to enjoy discussion at the soil pits which provided a nice visual representation of soil changes across a landscape and variety of loess over till in Mollisols.

The tour concluded at Gray Willows Farm in Campton Hills, a property newly acquired by Campton Township that is currently being constructed as a wetland mitigation bank by V3 Companies. George Milner and Alicia Metzger, both of V3 Companies, provided an overview of the wetland mitigation bank design process, construction, and management aspects required to achieve regulatory sign off for the mitigation bank. Two soil pits were available for observation and provided an overview of loess over till in Alfisols.

Day two of the tour took place on Saturday, October 20 at Environmental Design Service located in Kane County where ISCA members were given hands on training and overview of site septic evaluation. Ted McCannon graciously hosted the tour on his property and provided two soil pits for use in the demonstration, as well as a nice warm barn for discussion and lunch! Brad Cate, Bruce Putman, Ted McCannon and Mike Konen assisted with the demonstration and provided guidance to ISCA members on how to conduct a septic evaluation on a property. In addition to the demonstration, ISCA members had a chance to practice their texturing skills and recalibrate with soil samples provided by Scott Wiesbrook and Bill Teater.

Overall, the tour was a success! Many thanks to those who donated their time, property, as well as sponsored the event, including Northern Illinois University, Bayer Corporation, V3 Companies, Campton Township, Environmental Design Service Illinois Environmental Health Association and NRCS. A special thanks goes out to those who presented and dedicated their time, including Bruce Putman, Mike Konen, Tom Copenhaver, Brad Cate, Ted McCannon, Rachel Welch, Zak Swanson, Nancy Leffler and George Milner. An extra thanks to Chris Miller, Karla Hansen Petges, and Natalie Irizarry from Juneau, WI Soil Survey Office from coming all the way down to dig the pits! Lastly, the tour would not have been possible without the hard work of several ISCA members, including Sarah Smith, Mark Bramstedt, Don Fehrenbacher, Mike Konen, Bruce Putman, Brad Cate, Rachel Welch and Alicia Metzger.

# Soils of Illinois Fall Tour Pictures

Photo credit: Alicia Metzger



## Officers of the Illinois Soil Classifiers Association: An Historical Review

Submitted by Bill Kreznor, ISCA Historian

*“When one loves one’s Art, no service seems to large.”* O. Henry (William Sydney Porter)

The holiday season serves to mark the beginning of the final third of our Association’s administrative year. The Nominations Committee, chaired by the Past President, will begin to seek candidates for the offices of President-Elect, Vice President, and Treasurer. (Note: Treasurer and Secretary serve a 3-year term. The term of the current Treasurer ends in 2019. The term of the current Secretary will end in 2021). The current President-Elect, who will assume the office of President this spring, will be looking to select chairpersons for the various standing committees and make two appointments to the Certification Board.

In its infancy, the ISCA was mainly comprised of professionals serving the public sector employed by federal and state agencies, and educators employed by Illinois universities. Its officers and committee chairs included a mix of such individuals. The results of the first election in June of 1975 included President Rex Mapes and President-Elect Wiley Scott, both USDA-SCS employees. University of Illinois professors Ivan Jansen and John Alexander were elected to the offices of Vice president and Secretary-Treasurer, respectively. George Walker, a retired USDA-SCS employee who had served as Temporary Chair of the group of soil classifiers working since January 1974 to establish a formal professional association, was named Past President.

The 1980s ushered in an acceleration of the project soil survey program. This coincided with new opportunities for soil classifiers in the private sector. Some of the seasoned USDA-SCS employees retired from federal service but continued working as private consultants to local units of government and land developers. One of the first of these consultants, Jack Paschke, became the first such ISCA President in 1981. It also led to more women entering career paths as field soil classifiers. In 1987, Tonie Endres became the first woman ISCA President.

ISCA membership has become more balanced with the numbers of soil classifiers employed in the private sector and in local units of government such as county agencies approaching those employed in federal and state agencies and in academia.

In the course of updating the list of past officers and committee chairs, including those who have served as Certification Board Chair, it’s clear that members representing all categories of public service and private practice have served our Association for at least one term as an officer, committee chair or member, or Certification Board member. ISCA remains relevant as a result of active participation by its members. We could not provide our members nor serve the public with the opportunities for education, technical advice, networking, and leadership without an active membership willing to serve. Special acknowledgement for those who have stepped up to serve our Association in a large way is highlighted, below.

## Officers of the Illinois Soil Classifiers Association: An Historical Review



### The Rock of Gibraltar:

Chuck Frazee has served continuously as Treasurer since 1993. That's 25 years (and counting). He's up for re-election in 2019 if he decides to seek another term. Will this rock be moved? Stay tuned.

### Tip of the Chance the Rapper Hat:

Several members have served two terms as President. But only two have been elected three times: Mark Bramstedt and Bruce Putman. When you consider the President will serve on the Executive Council over a three-year stretch as President-Elect, President, and Past President, that's a lot of years.



### Lighter of the Banker's Lamp:

Three members have served as Vice President for three terms, developing a budget and auditing the books: Dale Calsyn, Bill Kreznor, and Bill Teater.

### The Swiss Army:

A number of members have served in multiple capacities as officers, standing and *ad hoc* committee chairs, and Certification Board Chair over their careers. Some of these veterans will "re-enlist" and be available to mentor those less-experienced members willing to step up as an officer or committee chair. Mark Bramstedt may be considered Army Captain, having held ten such positions. The infantry includes Bill Kreznor (9), Bruce Putman (8), Les Bushue, Don Fehrenbacher, and Roger Windhorn (7), and John Alexander, Brad Cate, Tonie Endres, Todd Soukup, and Steve Zwicker (6).



### Interested in running for an office or serving as committee chair or member, or as a member of the Certification Board (if certified)?

Contact Past-President (and chair of the Nominations Committee) **Todd Soukup**, if you are interested in running for office. Contact any member of the Executive Council, if you would like to serve as a chair or member of one of the standing or *ad hoc* committees. If you are a "first-timer," know that there is a cadre of members available who are eager to mentor and support you as you take that next step in service of the ISCA.

*(Author's note: the spreadsheet of the list of officers, committee chairs, and Certification Board Chairs for 1975 through 2018 is available upon request. Contact Bill Kreznor at [wkreznor@wrksoiltesting.com](mailto:wkreznor@wrksoiltesting.com).)*

## New Member Bio

### Welcome To ISCA, Virginia Brown!!!



Virginia Brown is a consulting soil scientist at Duraroot Environmental, based out of the Chicago area. Virginia graduated from the North Carolina State Soil Science program, with a background primarily in erosion control, stormwater, and restoration. She has experience working on the environmental side of construction projects including roadwork, oil and gas pipelines, and electric transmission. Her career in environmental compliance has taken her all over the US, working in a variety of environments from the mountains of Appalachia to the plains of the Dakotas.



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### 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. It can be done, but increases work load for the committee.

The Newsletter Committee reserves the right to make edits/corrections deemed appropriate

### 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.

## ISCA on Facebook

For those of you who want to keep in touch with ISCA members and others interested in soils in Illinois, join our group on Facebook. Search Facebook for "Illinois Soil Classifiers Association" and become a friend of ISCA. Anyone may post messages, announcements, pictures or events that may be of interest to our membership. This is a great venue for posting meetings of other associations or organizations who use soil information. This is also a great place to post pictures of recent projects, interesting soils, or maybe something unrelated to soils, but of general interest to the membership. If you don't have a Facebook account, it is easy to set up. Just go to [www.facebook.com](http://www.facebook.com) and follow the instructions. Unfortunately, the Facebook site is restricted on some government computers, so many of you will need to do this at home. Contact [webmaster@illinoissoils.org](mailto:webmaster@illinoissoils.org) if you have any difficulty in accessing the ISCA Group or if you have any questions or comments.



### ISCA Newsletter Committee is looking for pictures of its 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](http://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](http://www.illinoissoils.org/news)**

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

### Change of Address Form

Name: \_\_\_\_\_

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\*Mail to: Scott Wiesbrook, ISCA Secretary, 1816 S. Oak St., IL 61820