

## **Upcoming Events:**

45<sup>th</sup> Annual March 21<sup>st</sup>, Meeting Champaign, IL

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# Illinois Soil Classifiers Association Newsletter

Winter-February 2020

## Message from the President

Submitted by Mary Beth Falsey

The ISCA had a rather productive year in 2019 to close out the decade. We gained some new members and bid farewell to others. Numerous educational opportunities were available and the ISCA made efforts to provide public outreach opportunities on soil science as well as the ISCA as an association. The ISCA was represented at the 2019 Farm Progress Show in Decatur in August with a Soil Pit Demonstration. There were advancements made with the Soil Texture Project and the ISCA should soon be able to provide verified texture samples. The 39th Annual Central States Forest Workshop was held in Carbondale in October with a topic of Healthy Soils, Healthy Forests. The Certification Board, the Ethics Certification, and Membership Committee, and the Constitution, By-Laws, and Legislative Committee all contributed to propose minor but crucial reforms so that moving forward the Certification Board can transition from year to year as seamlessly as possible. ISCA members represented the Association and shared their knowledge at speaking events for the Illinois Environmental Health Association (IEHA) throughout the state. Planning began for another Hydric Soil Course in northern Illinois to be held in 2020. These are just some of the things we worked on in 2019 and I'm sure I haven't listed them all. As my time as President draws to a close, I'd like to thank everyone who helped the ISCA accomplish all we did this year, specifically the Council, Committee Chairs, and Certification Board. I'd like to welcome Alicia Metzger as she takes over the position in 2020 and I look forward what the next year brings to the ISCA!

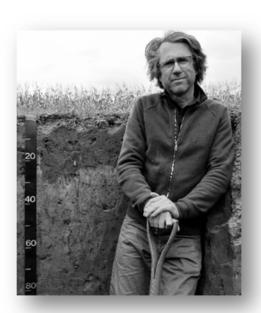
## 45th ISCA Annual Meeting

## March 21st, 2020 Illinois Natural History Building, 1816 S. Oak St., Champaign, IL

Name	Number Attending			
Total Payment \$				
** Early bird rate \$10; Regular Registration rate \$20 **				
, , ,	; Regular registration after March 12th. ailable, however lunch may not.			
Register at illinoissoils.org through Pay	Pal (\$1 service fee) or by regular mail to:			
Scott Wiesbrook 1816 S. Oak St. Champaign, IL 61820 If registering by regular mail, please include a	check for \$10 per person (postmark prior to			
3/12) or \$20 per person afterwards.  Questions please contact:  Ron.Collman@usda.gov Work: 217-353-6639 Cell: 217-841-3812	Tentative Agenda			
	I 2:00pm Opening Remarks/Call for Ballots/Lunch I:00pm			
	Keynote: Digital pedology – studying soil profiles Speaker: Dr. Alfred Hartemink			
	2:30pm Business Meeting			
The Certification Board has approved the following PDH amounts that can be reported for the upcoming Annual Meeting. This meeting will provide a total of <b>3 PDH</b> for <b>category C</b> —attendance or participation in seminars, tutorials, clinics, workshops, symposia, in-house courses, field tours/exercises, or technical presentations made at meetings, conventions, or conferences, if attend all agenda items.				
Opening Remarks/Call for Ballo	ts I PDH			
Keynote Speaker	I PDH			
Business Meeting	I PDH			

## 45th ISCA Annual Meeting

## Speaker for the Annual Meeting: Dr. Alfred Hartemink



Dr. Alfred Hartemink is the Vilas Distinguished Achievement Professor and M.T. Beatty Professor of Soil Science and the Chair of the Department of Soil Science at the University of Wisconsin-Madison. His current research focusses on digital soil morphometrics, soil mapping, and soil carbon. Prior to his current position, he was 12 years at ISRIC—World Soil Information, and coordinator of the GlobalSoilMap project. He has worked for 12 years in Tanzania, DR Congo, Indonesia, Kenya, Australia and Papua New Guinea, and for shorter periods in several other countries. Alfred was (Deputy) Secretary General of the International Union of Soil Sciences between 2002 and 2014, and is collaborator in a large national and international network of soil scientists. He is founding Editor-in-Chief of Geoderma Regional, and of the Springer World Soils Book Series.

## **Keynote: Digital pedology – studying soil profiles**

#### Abstract:

Major changes have occurred in the soil science discipline and quantitative techniques have contributed to the quantification of soil science processes and properties. New techniques have been applied to legacy soil data as well as information collected by a range of new sensors. It has led to improved quantification and faster assessment of soil resources. For the past 5 years, we have been working on the development of digital soil morphometrics for enhanced understanding of the soil profile. We have studied the soil profile in-situ, and in the lab, and sampled by horizon and using one or more transects. We have rasterized the soil profile and also analysed soil profile images. We have compared different sampling methods and have gained understanding on the variation within and between soil horizons. This talk will summarise the main findings.

#### 2020 Election Ballot and Candidate Bios

#### **Ballot for 2020 ISCA Elections**

Voting rights are for Full Members only. Please vote for one candidate 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
John Ford
Josh Litwiller
Write-in candidate for President-Elect**Write-in candidates must have agreed to run for the office**
Vice President
Bryan Fitch
Frank Heisner
Bob Oja
Write-in candidate for Vice President **Write-in candidates must have agreed to run for the office**

#### Submit your ballot:

You may bring your ballot to the 2020 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 <u>seal your ballot</u> in a <u>separate</u> envelope and mark it with "Ballot" on the outside of that envelope. Please put the ballot envelope in another envelope and mail with postage. Please be sure to include your return address on the outer envelope, so we know you are an eligible voter. Envelopes without a return address will not be counted. Mailed ballots will be recorded as to who has voted (to prevent voting more than once) and then the unopened, separately sealed ballots will be passed to the Nominations Committee at the Annual Meeting. Mailed ballots must be received by <u>March 18th</u>, <u>2020</u> in order to be counted.

#### 2020 Election Ballot and Candidate Bios

## **Candidate Bios for 2020 ISCA Election**

## President-Elect - John Ford & Josh Litwiller

**John Ford** attended Western Illinois University where he received a B.S. in Agriculture in 1990 with a minor in Agricultural Mechanization. He has been employed with USDA NRCS since 1989 where he has been a Soil Conservationist, District Conservationist and Soil Scientist. John obtained his ISCA certification in 2003. His soil classifying experience comes from 1998 to 2003 where he was an NRCS Soil Scientist in the Springfield MLRA office. Beginning in 2013, John has used his classification experience as a member of the NRCS Wetland Team making certified wetland determinations. He has also been working and collaborating with other ISCA CPSCs for about two years, describing soil cores and other related on-site work. John currently is serving on the 2019 ISCA Ethics, Certification, and Membership Committee.

**Josh Litwiller** graduated from Illinois State University in 2015. He became certified as a professional soil classifier in 2018 and has been doing on-site soil investigations since then. Prior to certification, Josh assisted a soil classifier for eight years. Josh has served as ISCA Vice President and has chaired both the Public Relations & Education and the Finance Committees. He is also currently chair of the Constitution and By-Laws Committee. He is organized, efficient, and self-motivated.

## Vice President - Bryan Fitch, Frank Heisner, & Bob Oja

**Bryan Fitch** was born and raised in Casey Illinois. He earned his B.S. in Plant and Soil Science at Southern Illinois University in 1980 and his M.S. in Soil Science at Southern Illinois University in 1988. His mapping experiences includes times as a county soil scientist for the Jasper County Soil Survey (1988-1995) and as an SCS/NRCS Soil Scientist on the Franklin/Jefferson Counties Soil Survey (1995-2003). Bryan also worked as a Soil Scientist for the US Forest Service (1995-2003), as a MLRA Soil Scientist in Carbondale (2003-2009), and as the Resource Soil Scientist NRCS in southern Illinois from 2009 until his retirement from government service in 2019. Currently, Bryan is working as a Certified Professional Soil Classifier, conducting soil evaluations for septic systems. He has been a member of ISCA since 1986, serving a term as Vice President in the early 1990s.

**Frank Heisner** graduated from Iowa State University in 1988 with a B.S. in Forestry and emphasis in soils. His federal career began with the US Forest Service in Montana, North Dakota, and South Dakota where he described and classified soils for ecological classifications over a variety of landscapes, ranging from the sub humid oak savannas and tallgrass prairie of southeast North Dakota to Montana's highest alpine near Yellowstone National Park. Frank was also the Forest Service liaison for initiating the Soil Survey on the Little Missouri National Grasslands in North Dakota. In 1994, Frank enrolled at the University of Missouri-Columbia, receiving his M.S. in Soil Science in 1997, studying pedogenesis in recent Missouri River floodplain sediments. In 1999, Frank began a career with NRCS in Rock Falls, IL working in soil survey in NW Illinois. Frank continues to serve as a soil scientist with NRCS in Morrison, but in 2018 was reassigned from Soil Survey to the Wetland Compliance Team. Frank has served as Vice-President, President, and several committees for ISCA in the past. Frank resides in Prophetstown, IL with his wife, Diane.

**Bob Oja** served 4 years in the US Air Force after graduating high school and the earned a B.S. in Forest Administration with a soil science minor from the University of Wisconsin-Stevens Point in 1987. He spent the next year working for Soil Survey Leader Steve Elmer mapping soils a county soil scientist in Warren County, IL. Since that time, Bob has been employed by the McHenry-Lake Soil & Water Conservation District. He spends most of his time conducting soil borings for septic suitability and creating high intensity soil maps for subdivision platting. He became a Certified Professional Soil Classifier in 1992. Past work with ISCA includes a stint on the Certification Board and as Chairman of the Program Committee. He has four children and they and his wife Sherry all enjoy camping, fishing, and other outdoor activities.

## **Proposed By-Law Change**

Submitted by Josh Litwiller

The ISCA Council proposes an addendum to the Standards for Certification Section 4a. This change will improve the organization of the Certification Board by specifying the way in which officers are selected and by extending the term of the Secretary/Treasurer from one year to two years. This addendum has the support of the Certification Board and the Council. The addendum requires a two thirds vote from the membership during the annual meeting. Below is the current and proposed wording for your consideration. If passed, the proposed wording will replace the current wording.

## **Current wording:**

The Board shall elect from its membership, at its first meeting, officers for the coming year. The officers shall be chair, vice-chair, and secretary-treasurer. The duties of the chair shall be to preside at all meetings of the Board. The vice-chair shall preside in the absence of the chair. The secretary-treasurer shall keep all records and files of the Board.

#### **Proposed wording:**

At the first meeting of the Board, following the annual meeting, officers for the coming year shall be selected from within the Board as follows: the office of chair shall be filled by the vice-chair from the previous year, the office of vice-chair shall be elected each year from a second year member of the Board, and the office of secretary-treasurer shall be elected on alternating years to serve a two year term. The duties of the chair shall be to preside at all meetings of the Board. The vice-chair shall preside in the absence of the chair. The secretary-treasurer shall keep all records and files of the Board.

## **Additional Training Opportunities**

Submitted by Al Stone

# CERTIFIED SOIL TESTERS EXAM PREP AND CONTINUING EDUCATION CREDIT

#### Thursday, April 2 and Friday, April 3, 2020

Fond du Lac Campus, B-128 Instructor: Mark Finger

\$50 (62 & over \$36.35) per person per session.

#### Day 1 - Thursday, April 2, 2020

## Introduction to Onsite Waste Water Treatment and SPS 383/385 - CRN 31144 9:00 a.m. - 12:00 Noon

The first portion of this session will be a general introduction to onsite wastewater treatment. It will include an overview of onsite applications and techniques, a description of wastewater characteristics, and a discussion of the role of soil in treating wastewater. The second portion will cover WI administrative rules from SPS 383 and SPS 385 (Wisconsin Administrative Code) that pertain to soil and site evaluations and the site evaluator's responsibilities in Wisconsin.

#### Soil Fundamentals - CRN 31145

#### 1:00 p.m. - 4:00 p.m.

The objective of this session will be to provide the student with a basic understanding of the principles of soil genesis, morphology, and classification as they apply to the description and interpretation of soil profiles in relation to evaluating soil for wastewater treatment. The importance of recognizing genetic soil horizons and their properties will be stressed. Soil horizons as expressions of unique physical, chemical, and biological processes will also be explained. Also presented, a phase view of soil as a composite interaction of solids, liquids, and gases and the importance of this view in wastewater treatment.

#### Day 2 - Friday, April 3, 2020

#### Describing and Interpreting Soil Profiles - CRN 31146

#### 9:00 a.m. - 12:00 Noon

This session will be a collection of hands-on activities to introduce techniques and standard documentation protocols for describing soil profiles. Topics will include necessary equipment, identifying soil horizons, estimating soil texture, documenting soil colors, evaluating soil structure and consistency, recognizing miscellaneous profile features, using standard description notation, and completing an SBD 8330 soil evaluation form. Explanations of how to interpret the descriptive features will also be provided.

## Site Mapping Techniques and POWTS Design Rules/Principles - CRN 31147 1:00 p.m. - 4:00 p.m.

The importance of accurate site maps to avoid plan review and system installation problems will be the topic to begin this session. Basic field and drafting procedures for accurate mapping will be illustrated. The concluding part of this session will entail a summary of important POWTS design rules and principles that every CST should know to competently perform a soil and site evaluation.

# Field Practicum - Friday April 17, 2020 (weather permitting & location to be determined) \$100 (62 & over \$96.35) per person. 10:00 a.m. - 2:00 p.m.

#### Soil Testers: Field Practicum - CRN 31148

This field practicum will be offered as a way of practically applying the concepts and techniques covered during the classroom sessions. Students will be challenged to describe soil profiles and to perform an actual soil and site evaluation. Instructional guidance will be available for all activities.

Register Now! Call 1-800-472-4554



PERFORMANCE-MINDED BUSINESS SOLUTIONS

## **Careers in Consulting Soil Science: Recruiting and Training Our Replacements**

Submitted by Brandon Mueller and Bill Kreznor

Since the early 1970s, consulting Soil Classifiers in Illinois have been serving the public and units of government. Their task has been to help their clients understand soil properties and their limitations and potential in order to make science-based land use planning decisions. Many of these consultants are nearing retirement. Before their wealth of knowledge of the soils of Illinois is gone, a younger group of soil scientists must be recruited and trained to continue this important work. And now that certification has become codified in state and local regulations as the minimum standard to conduct this work, this group must have a pathway to certification.

As a first step and with some financial support from the Illinois Soil Classifiers Association (ISCA), the authors traveled to the University of Wisconsin-Stevens Point (UWSP) to deliver a message of opportunity in Illinois in the private sector for students studying Soil Science. The authors have a natural connection with UWSP. Both are alumni, Brandon having graduated this past May with a BS in Soil and Land Management. Bill has maintained connections with the UWSP College of Natural Resources (CNR) since graduating in 1976. He has gotten to know several of the current faculty in the Soil and Waste Resources discipline. His consulting company, William R. Kreznor & Associates, Inc., has been a supporter and sponsor of the UWSP collegiate soil judging team for several years. Familiarity with the soils program and its students led Bill to hire Brandon and begin training him toward gaining ISCA certification as a Soil Classifier.

The CNR sponsors a Career Fair each winter for students in natural resources looking for both full-time employment and summer internships. The authors secured a booth at the Career Fair held this past February 4. It was our goal to get the word out about opportunities in consulting soil science in Illinois. Additionally, with the support of Dr. Bryant Scharenbroch, Assistant Professor of Soil Science, we were given the opportunity to deliver an informal presentation describing the work of consulting soil classifiers in the private sector in Illinois (Figure 1). Many students put off selecting a major until the end of their second year. This may be due to soils being poorly represented in environmental science courses at the high school level. Also, at the college level, students typically don't enroll in soils courses until the second semester of their second year. Dr. Scharenbroch has been trying to generate an early interest in the study of soils by meeting with classes at local high schools, submitting articles to newspapers, and making television appearances.

Our table at the Career Fair was aligned perfectly with the main entrance, providing almost instant visibility (Figure 2). We met and talked with 40 to 50 students over the course of 5-plus hours. We were pleasantly surprised that about half were freshmen, sophomores, and juniors. This group would include ideal candidates for internships with consulting Soil Classifiers in Illinois, especially those who have participated for a year or two on the soil judging team. The senior and graduating students would likely be looking for more permanent, full-time positions. Students in other disciplines such as Water Resources, Forestry, Wildlife Management, and Environmental Education stopped by our table to talk. They seemed quite interested as well. A common theme of the type of questions we received were the mechanics of soil investigations and the type of projects consulting soil classifiers took on.

Later that evening, Brandon delivered a presentation highlighting career opportunities in private consulting in Illinois (Figure 3). We were astonished when we entered the venue and saw a crowd of students waiting to enter the lecture hall. There were some familiar faces from the Career Fair and a host of students we had not previously seen. Professor Scharenbroch later informed us that 90 to 100 students were in attendance. Again, most questions concerned the type of projects and work skills. We pointed out that regulations in Wisconsin were far different than those in Illinois. Certification, as the minimum standard to practice soil classification in Illinois, is codified in state and local regulations. And certification must be earned after completing rigorous requirements of education, experience, and written and field examination. At the conclusion of the presentation, we offered up some samples of various glacial tills of northeastern Illinois for the students to examine.

UWSP would be a great resource from which to recruit prospective Soil Classifiers. We are confident that other such institutions exist in Illinois and other locales in the Midwest. We encourage ISCA and its members to begin making personal contacts with soil science students and faculty specifically toward recruiting and training the next generation of practitioners. One way to enhance this process would be for ISCA to share the cost of hiring one or more summer interns to work with consulting Soil Classifiers willing to hire and mentor an intern. Our research suggests the cost for a 9-week summer internship would range from \$3,655 to \$5,365. This would include an hourly wage of \$11 to \$13, equipment and supplies, and workers compensation insurance. It is assumed the intern would have their own medical insurance. We also assume the supervisor (Soil Classifier) would do all the driving while on the job, eliminating any additional cost for automobile insurance. Where there are several Soil Classifiers working in the same region, the intern could be "shared" and work in different locations. This may enhance the financial incentive for a Soil Classifier to hire a summer intern.

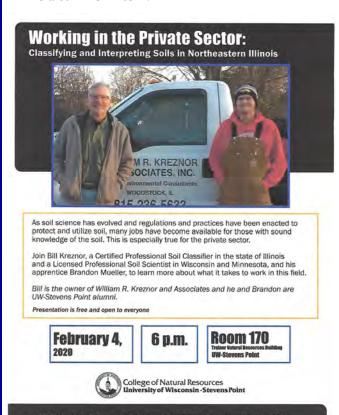




Figure 2. The authors pose at their table at the CNR Career Fair.

Figure 1. Flyer announcing our presentation on soils consulting

## Possible PDH for ISCA Hydric Soils Course

Submitted by Bob Tegeler

The Certification Board has approved the following possible PDHs that can be reported for the "ISCA Hydric Soil Indicators for Wetland Delineation Course", scheduled for April/May of this year.

For the Certified ISCA members who attend both days, a maximum of 10 PDHs could be reported in Category C. If only the first day is attended, a maximum of 6 PDHs could be reported in Category C. If only the second day is attended, a maximum of 4 PDHs could be reported in Category C.

If a Certified ISCA member is a presenter during the course, they can report PDHs in Category D for the length of the section in which they are presenting. The PDHs can be doubled if this is a new presentation for the member, and can include preparation time.

## **ISCA Web Gets an Update!**

Submitted by Mark Bramstedt

The ISCA website is moving platforms from one host server to another, all under the umbrella of the same host company, Web.com. This move will allow for the webpage to join the 21st century. The URL, or internet address, illinoissoils.org, will not change and the move should be seamless for all users. The need for a new website comes from the many tools that are used to access the internet. When the ISCA website was first designed, access to the internet was through dial-up modems attached to desktop computers. Today's generation of internet users access the internet mostly on mobile devices, such as smart phones and tablets.

Although many people still use computers at work, fewer people have a honkin' big machine on their desk at home. This new platform adjusts the website to whatever kind of device one uses to connect to the internet. It will also bring a fresh new look to the site. Another advantage of the new platform is that it will eventually allow us to have a Member's Only login page, so that we can limit public access to certain information about ISCA, it will give us an opportunity to have on-line dialogue about soils issues, and hopefully, a better way to submit PDHs for our CPSCs. Finally, the new site will have better security, giving us more confidence in submitting personal information and conducting financial transactions.

The site is in construction right now and is anticipated to go public near the end of March – maybe in time for the Annual Meeting! If you have any suggestions or comments about the current and future website, or if you have experience in web design and database and would like to assist with the website in the future, please contact the Webmaster@illinoissoils.org

## www.illinoissoils.org

Newsletter Chair: Jenwei Tsai 2019 Committee: Dennis Keene, Rachel Welch, Liz Miernicki, and Alicia Metzger

Phone: 302-739-9326

Address: 89 Kings Highway Dover, DE, 19901

Email: Newsletter@illinoissoils.org

#### **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 <a href="https://www.facebook.com">www.facebook.com</a> 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 <a href="https://webmaster@illinoissoils.org">webmaster@illinoissoils.org</a> 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 news-

<u>letters</u>. Submissions can be sent electronically or hard copy to the staff address, see above and left. Please include a narrative for the caption! If hard copies are sent please indicate, if they are to be returned otherwise photographs will be retained in an archive photos file.

www.illinoissoils.org

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

Better yet... make it your home page!



ISCA Newsletter 89 Kings Highway Dover, DE, 19901

## Visit the ISCA website to see the online version of this newsletter

# www.illinoissoils.org/news

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