

# Illinois Soil Classifiers Association Newsletter

#### Winter — February 2024

# **Message from the President**

At the Fall Meeting last October, I was fortunate to receive a copy of a book from one of our speakers. About ten of you attending received the same book as a door prize. The book I am referring to is titled "<u>Dirt to Soil</u>" and it is written by a farmer from North Dakota named Gabe Brown. Gabe is a pioneer in the soil health field and was named one of the top twenty-five most influential agricultural leaders in our country.

Gabe has an easy, light writing style which makes his book easy to read and enjoyable, but also very informative. Gabe grew up in a small city but developed an interest in farming after taking a ninth-grade class in vocational agriculture. His book goes on to how he got into farming as an adult, and how he almost lost everything as a conventional farmer due to a string of bad weather events. At this point he was desperate and knew that he could not support his family using main-stream farming methods. A lack of money forced him into trying no-till, and low input farming with less commercial fertilizers and pesticides. He began to see these forced changes have a positive impact on his soils, and on his bottom line.

The later part of his book goes on to speak about the Five Principles of Soil Health. These five principles will make sense to us Soil Scientists but are not followed by most agricultural producers. The first principle is to <u>Limit Disturbance</u>. Tilling the soil breaks down soil structure, reduces water infiltration, and accelerates the breakdown of organic matter. Tillage also diminishes mycorrhizal networks which greatly extend the reach of plant roots in healthy soils. Principle two is also simple-<u>Armor the Soil Surface</u>. By keeping plants growing as long as possible you protect the soil from wind and water erosion. A cover of plants also helps protect the soil from temperature extremes. The third principle is <u>Build Diversity</u>. The more crops you can include in your crop rotation, or the more species of plants in your cover crop, the better for the biological health of your soil. The fourth principle is related to the second and third. It is <u>Keep Living Roots in the Soil</u>. Gabe points out that living roots will add carbon to the soil, feed the soil biology, and enhance and proliferate mycorrhizal fungi. Lastly, principle five is <u>Integrate Animals</u>. Gabe explains how prairie soils developed over centuries of grazing animals who moved frequently and stimulated plants to release root exudates in order to attract biology that supplied the nutrients to the plant for regrowth. Over the years this helped pump massive amounts of carbon into the soils.

ISCA attempted to have Gabe Brown speak at this year's Annual Meeting. Unfortunately, due to health reasons he had to turn us down. Fortunately, Mr. Brown was able to suggest we contact a farmer he knows right here in Illinois. This gentleman is this year's Annual Meeting speaker, Luke Jones. Luke farms near Rushville which is in west central Illinois. Luke has a degree in Agricultural Science from Western Illinois. He has many years of farming experience and has been implementing regenerative agricultural practices to improve his soils health. He takes pride in the fact that he is considered "not normal" when it comes to established ag practices. Luke works as a consultant for Understanding Ag, an organization that promotes soil health by in person consultation with producers. Luke will talk about his experiences, about regenerative farming, and soil health. I hope you will be able to attend, and please invite others who may be interested to register for what I believe will be a very informative and interesting talk.

See you at the Annual Meeting!

Bob Oja

#### Upcoming Events:

March 6th **ISCA** Annual Meeting **Inside this issue:** 2-5 2023 Fall Meeting Recap Soil Judging Team 6 Qualifies for 2024 **Nationals** 7 Burton W. Ray **Scholarship Award** Recipient **Proposed Changes to** 8 Soil Taxonomy 9 Call for Nominations—Bent Auger Award 2024 Annual 10 **Meeting Information** 11 2024 Annual **Meeting Guest** Speaker 2024 ISCA Election 12 Ballot 2024 ISCA Election 13 Candidate **Biographies** 2024 NCSS North 14 **Central Regional Soil Survey Conference ISCA on Social Media** 15

Submitted by Bill Kreznor

The 2023 Fall Meeting took place on Saturday, October 7, 2023 in Elizabeth, Illinois. Topics of discussion included karst features of Jo Daviess County including sink holes, springs, caves, algific slopes, and crop lines. Enjoy some photos of the event submitted courtesy of Bill Kreznor and Bob Oja.





Speakers Beth Baranski (top), Greg Thoren (middle) and Don Luman (bottom).



Submitted by Bill Kreznor

# And of course lunch and door prizes!







Submitted by Bill Kreznor

# It's always a good day to get in a soil pit!



Submitted by Bill Kreznor

# Thank you to everyone who helped make the 2023 Fall Meeting a success!



# Soil Judging Team Qualifies for 2024 Nationals!

#### Submitted by Liz Miernicki

Congratulations to the University of Illinois Soil Judging Team on qualifying for the 2024 National Collegiate Soils Competition this past October. This semester students participated in the Region III Soil Judging Contest hosted by Purdue University and Indiana NRCS employees. The competition was held October 17-20th near West Lafayette, Indiana. The first two days were dedicated to practice and then the last two days students competed individually and as a team. The University of Illinois placed fourth overall in the competition. The team was led by Liz Miernicki and assistant coach Scott Wiesbrook, both soil scientists at the Illinois Natural History Survey.

Soil judging is a NRES 285 laboratory and field course where students learn to describe, interpret, and classify soil profiles based on varying soil properties and landscape features. A few physical soil properties described include soil texture, structure, and moist strength. These soil properties and others are then used to recognize limitations relative to homes with basements, traditional septic system absorption fields, and local roads and streets. The competition portion of the class is a fun and excellent opportunity to ap-



ply all skills learned throughout the first half of the semester. Often this course is the first-time students are exposed to soil judging, so qualifying for nationals feels very special!

The University of Illinois was one of nine schools that competed in the 2023 Regional Collegiate Soils Competition, which included Purdue University, the University of Wisconsin – Stevens Point, the Univer-



sity of Wisconsin – Platteville, Grand Valley State University, Wilmington College, Southern Illinois University, Michigan State University, and the Ohio State University.

# **Burton W. Ray Scholarship Award Recipient**

#### Submitted by Liz Miernicki

Every year students who are enrolled at an Illinois college or university can win the Burton W. Ray Scholarship Award in Soil Science. The award was developed in 1984 by the Illinois Soil Classifiers Association in honor of Burton W. Ray, a charter member of the organization. Burt was a graduate of the University of Illinois and began his career as a soil scientist in 1946 with the Soil Conservation Service and later with the Bureau of Plant Industry, Soils, and Agricultural Engineering. In 1948 he joined the Illinois Soil Survey as a Research Assistant of the Department of Agronomy at the University of Illinois. He was made Assistant Professor of Pedology in 1960 and Associate Professor of Pedology in 1970.

The award is given in Burt Ray's memory to a college student who achieved the highest individual score in the regional competition for that year. The 2023 winner of the Burton W. Ray Scholarship Award in Soil Science is U of I's Joshua D'Avola. This semester was the first time Joshua learned about soil judging! Congratulations, Joshua!



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# **Proposed Changes to Soil Taxonomy**

An important update on the Proposed Changes to Soil Taxonomy that was sent out by IS-CA in 2023 has been posted to the ISCA website. Proposed changes to Soil Taxonomy are currently in discussion and include the addition of two new soil orders, <u>Aquasols and Artesols</u>. The addition of Aquasols and Artesols has the potential to shift the way we classify many Illinois soils, so your review and input to the proposed changes is needed and appreciated!

# An overview of the proposed changes to taxonomy is provided below:

"The proposed changes were initiated during the 2021 National Cooperative Soil Survey Conference, where a formal vote was taken during the Soil Taxonomy committee meeting to consider the proposal for addition into Soil Taxonomy. Of the 55 individuals that voted, 80% voted to approve the proposal toward inclusion into Soil Taxonomy.

Wet soils serve as the foundation and structure of a range of unique and valued ecosystems. Creating a wet soil order explicitly recognizes the values and functions of these soils which serve as the core of all soil interpretations. This aim is clear in the title of the classification system: "Soil Taxonomy: A Basic System for Making and Interpreting Soil Surveys". Identifying the wettest soils is one of the most important uses of a soil classification system. The National Soil Survey Handbook (USDA-NRCS, 2015) recognizes over 30 interpretations that are driven by the depth of the water table. Adopting a wet soil order would therefore emphasize the importance of soil interpretations at the highest level in Soil Taxonomy while also recognizing the most important driver of soil morphology (hydrology). "

A link to the full document outlining the proposed changes and list of reference documents for your review is posted on the ISCA Website under Announcements. All questions and comments should be sent to Dr. Joey Shaw, the USDA-NRCS National Soil Taxonomy Leader, at joey.shaw@usda.gov

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# Call for Nominations—2024 Bent Auger Award

Submitted by Bob Oja

It's that time of year again! Please submit your stories (true or partially true) to win this highly coveted award. This could be from the last year, or from when you first broke into soil science.

As its name suggests, this award is given each year to an individual or group of individuals who displays "excellence" in the field. Qualifying events and situations are numerous and unrestricted. Stories do not have to be "entirely" true, but are preferable if based on partial truth. No story or tale is prohibited! If you know anyone who is deserving of the 2024 Bent Auger Award, please bring the nomination to the Annual Meeting or send your nomination to Bob Oja at <u>bob@johnraber.com</u>



# 49th Annual ISCA Meeting

Submitted by Bob Oja

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## Wednesday, March 6th, 2024

# 11:45am

I Hotel Illinois Conference Center Technology Room 1900 S 1st St, Champaign, IL 61820 \*Registration deadline is February 26, 2024\*

Register online at <u>illinoissoils.org</u> under the Announcements page Payment can be made with a major credit card through PayPal



HOME × ANNOUNCEMENTS FOR SALE BY MEMBERS ABOUT US × HIRE A SOIL CLASSIFIER × MEMBER RESOURCES ×

### Cost (includes catered lunch):

- \$25 ISCA Members and attendees
- \$10 Student

# Agenda

- 10:30 AM Council Meeting
- 11:45 AM Opening Remarks
- 12:00 PM American Buffet Lunch
- 1:00 PM Burt Ray Award
- 1:05 PM Guest Speaker
- 2:30 PM Business Meeting\*

\*Those who would like to attend only the 2:30 PM business meeting may participate for FREE

This meeting will provide **3.0 PDHs** for <u>Category C</u> – Attendance or participation in seminars, tutorials, clinics, workshops, symposia, in-house courses, field tours/exercises, or technical presentation made at meetings, conventions, or conferences.

## 2024 Annual Meeting Guest Speaker

Submitted by Bob Oja

### Luke Jones

My name is Luke Jones. I was born and raised in west central Illinois, and I currently live in Rushville with my wife Jennifer and 3 children; Clara, Elliott, Rhett and future baby Jones coming in May/June. We run a diverse operation including production sheep (Australian White), cattle, laying hens, meat birds, and row crops consisting of corn, soybeans, and wheat. We implement regenerative ag practices on our operation and consider ourselves "not normal" in our area in terms of agricultural production, and we are content with that. I also work as a consultant for Understanding Ag where we offer individual consultation and put on many educational events across the country and abroad. There is nothing more rewarding than working with the land and implementing practices to work towards restoring land to historical ecological context while



staying profitable in production ag. It is my passion to work with producers of all sorts by meeting them where they are and helping them down the path of soil regeneration. I look forward to sharing our approach on how we implement regenerative agriculture on our farm and how I work with producers to achieve a healthier soil with improved function so that we can restore the #1 resource, THE SOIL!

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2024 ISCA Election Pollet	Fage 12	
2024 ISCA Election Ballot		
Su	ubmitted by Liz Miernicki	
Voting rights are for <u>Full Members</u> only		
Biographies for each candidate are provided on the next page		
Place an X next to one candidate of choice per office		
Write in candidates must have agreed prior to election to run for that off	ice	
President—Elect		
Doug Gaines		
Alicia Metzger		
(Write In Candidate)		
Vice—President		
Josh Litwiller		
Ashtyn Stufflebeam		
(Write In Candidate)		
You may vote by bringing the ballot to the 2024 Annual Meeting in a seal	led envelope	
marked "Ballot" <u>or</u> mailing to: Scott Wiesbrook		
580 CR 1700E		
Philo, Illinois 61864		
For confidentiality, please mail the ballot inside of a separate, sealed envelope marked		
<u>"Ballot" on the outside</u>		
*Mailed ballots must be postmarked by February 23, 2024*		

# **Biographies for 2024 ISCA Elections**

Submitted by Liz Miernicki

#### President—Elect

#### **Doug Gaines**

Doug Gaines grew up on a farm in southern Illinois and received his B.S. in Agronomy Science from University of Illinois in 1983. Doug worked as a Soil Scientist with Cooperative Soil Survey in Marion and Clinton counties in Illinois and Missouri from 1983—1990 and for a geotechnical engineer as a Field Technician, Staff Scientist, and Project Scientist from 1990-1994. Most recently, for over 29 years, Doug has owned and operated his own consulting firm specializing in On-Site Soil Evaluations for septic systems and wetlands. Doug has been an active IS-CA member and in the past has served as ISCA Program Chair, President, Public Relations Chair, Technical Advisory Commitee Chair, and served as the Secretary and Treasurer on the Certification Board. Doug also holds multiple professional certifications including Certified Professional Soil Classifier with ISCA, Certified Professional Soil Scientist with SSSA, and a licensed Soil Evaluator by the state of Missouri.

#### Alicia Metzger

Alicia Metzger graduated from Northern Illinois University with a B.S. in Geography in 2008 and a M.S. in Geography with an emphasis on soil science in 2010. Alicia has worked as a soil and wetland scientist at V3 Companies in Woodridge since 2011 and has conducted over 600 hydric soil investigations for wetland delineations throughout Illinois and the surrounding states. Alicia has been a licensed Professional Wetland Scientist since 2017 and Certified Professional Soil Classifier since 2018. Alicia has been actively involved in ISCA since joining in 2013 including currently serving as Chairman of the Newsletter Committee, past President, Constitution and By-Laws, Nominations, and Public Relations & Education committees, as well as has helped plan and teach multiple ISCA meetings, workshops, and training courses.

#### Vice—President

#### Josh Litwiller

Josh Litwiller graduated with a bachelor's degree from Illinois State University in 2015 and was certified as a professional soil classifier in 2018. Josh has worked for over a decade doing on-site soil investigations for septic systems. As a member of ISCA Josh has served as President and Vice-President and has chaired many committees including public relations and education, finance, constitution and by-laws, and texture project. Josh also represents ISCA by judging soil pits for high school soil judging contests, giving lectures for health departments and septic installers, and leading college classes through soil pits.

#### Ashtyn Stufflebeam

Ashtyn Stufflebeam received a B.S. in Soil and Environmental Plant Sciences with a soil and water emphasis from Texas A&M University in 2020. Throughout college, Ashtyn interned with the NRCS as a soil conservationist for 2 summers before switching to soil survey where she interned an additional 2 summers. After graduation, Ashtyn started working full time with the USDA Soil Survey office in Springfield, IL as a soil scientist. Ashtyn first got involved with the ISCA as a student member in 2019. In 2022, Ashtyn took on the role as the Public Relations and Education Committee Chairperson and is actively serving her second year.

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# 2024 NCSS North Central Regional Soil Survey Conference

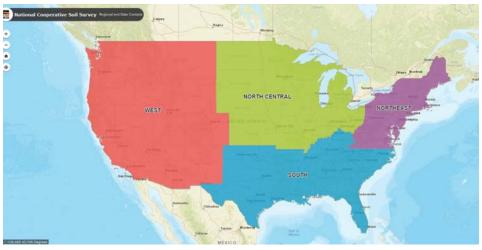
Submitted by Jennifer Smith

Wisconsin is currently in the planning stages in preparation to host the 2024 NCSS North Central Regional Soil Survey Conference in Platteville, Wisconsin from June 24-27, 2024. Information and details can be found here: <u>https://www.nrcs.usda.gov/</u> <u>conservation-basics/natural-resource-concerns/soil/2024-north-central-regional-soil-</u> <u>survey</u>

If anyone is interested in serving on any of the 10 committees, please visit <u>https://</u><u>www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/soil/north-central-ncss-committees for</u> further information. The committees include:

- By-Laws
- Interpretations
- Research Priorities
- Soil and Ecosystem Dynamics
- Standards
- Taxonomy
- Technology
- Hydric Soils
- Subaqueous Soils
- Urban Soils

Additionally, if anyone is interested in serving as the Co-Chair of Technology or Standards committee, please contact the other Co-Chair for more information.



Map depicting the NCSS Regions

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## www.illinoissoils.org

#### **ISCA Newsletter Staff**

Alicia Metzger, Chairperson Jenwei Tsai, Committee Member

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 and Twitter**

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 or Twitter. Search Facebook for "Illinois Soil Classifiers Association" or Twitter for @ISCA\_Soil. Anyone may post messages, announcements, pictures or events that may be of interest to our membership. These are great platforms for posting information and 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 Facebook or Twitter, it is easy to set up. Just go to <u>www.facebook.com</u> or <u>www.twitter.com</u> and follow the instructions. Unfortunately, these sites are restricted on some government computers, so many of you will need to do this at home. Contact <u>webmaster@illinoissoils.org</u> if you have any difficulty or if you have any questions or comments.

facebook.





### 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

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



ISCA Newsletter 46W951 Country Lane Maple Park, IL 60151

# Visit the ISCA website for access to all newsletters https://www.illinoissoils.org/member-resources/newsletter/

Change of Address Form	
Name:	
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E-Mail:	
*Mail to: Scott Wiesbrook, ISCA Secretary, 1816 S. Oak St., IL 61820	